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UNIVERSITY OF OREGON BULLETINS

New Series. Vol. 3. No. I.

CATALOGUE

1901-1902

Entered as Second Class Matter at the Postoffice at Eugene, Oregon

JULY, 1902

THE

University of Oregon

CATALOGUE

For the Year 1901-1902

AND

ANNOUNCEMENTS

For the Year 1902-1903

EUGENE, OREGON
PUBLISHED BY THE UNIVERSITY
1902

CONTENTS

	Page
University Calendar, 1902-03	5
The Board of Regents	8
Administrative Officers	9
The General Faculty	10
Committees of the Faculty	17
The University	18
History and Organization	20
Buildings and Grounds	20
General Infomration	22
The Graduate School	34
The College of Literature, Science and The Arts, The College of Science and Engineering, The School of Mines and Mining	39
The University Academy, or Preparatory School	75
The School of Music	82
The School of Medicine	150
The School of Law	164
Students	166
Summary of Officers, Instructors and Students	178
Index	179

The University Bulletins are published by authority of the Board of Regents during the University year. Bulletins will be sent gratuitously, postage paid, to all persons who apply for them. In calling for Bulletins please state the department of the University concerning which you desire information.

THE PRESIDENT,
Universiiy of Oregon, Eugene, Or.

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1901-02

CALENDAR FOR 1902-1903

1902

JULY

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1903

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JUNE

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CALENDAR

Academic Year 1902-1903.

First Semester—September 17 to February 6.

Second Semester—February 9 to June 18.

Examination of Candidates for Admission—September 15, 16.

Baccalaureate Sermon—Sunday, June 14.

Class Day—Tuesday, June 16.

Alumni Day—Wednesday, June 17.

Commencement—Thursday, June 18.

Academic Year 1902-1903 in Detail.

September 17, Wednesday—First semester in Academic Colleges opens.

September 17, Wednesday; September 18, Thursday—Entrance examinations at Eugene for the Academic Colleges and University Academy. Filing of applications and credentials from accredited schools and of applications for admission to advanced and graduate standing and to rank as special students.

September 18, Thursday, to September 22, Monday—Payment of Incidental Fees and recording of receipts with Registrar.

September 18, Thursday, to September 22, Monday—Committees of the Faculty and Instructors in Academic Schools and Colleges keep office hours for consultation with upper class, special and graduate students.

September 22, Monday—Registration of upper class, special and graduate students for courses of study. Instruction in upper classes begins.

September 23, Tuesday—Registration of freshmen and third and fourth year students in University Academy with instructors for courses of study. Instruction begins.

September 25, Thursday—Session of the School of Law begins in Portland.

September 28, Sunday, 3 P. M.—Address before Y. M. C. A. and Y. W. C. A.

September 29, Monday—Session of the School of Medicine begins in Portland.

October 3, Friday, 3 P. M.—Annual reception of Literary Societies to Students and Faculty.

October 4, Saturday, 8 P. M.—Piano and song recital.

October 15, Wednesday, 9:50 A. M.—Annual address by President of the University.

November 25, Tuesday, 8 P. M.—Annual Glee Club Thanksgiving Concert.

November 26, Wednesday, 12 M., to November 30, Sunday—Thanksgiving recess of three and one-half days.

December 1, Monday; December 2, Tuesday—Examinations in Academic Colleges and University Academy for the removal of conditions.

December 13, Saturday, 8 P. M.—Students' recital.

December 19, Friday, 8 P. M.—Treble Clef Concert.

December 20, Saturday; January 5, Sunday—Christmas Vacation.

January 24, Saturday, 8 P. M.—Students' Recital.

January 28, Wednesday—Midyear examinations in Academic Colleges begin.

February 6, Friday—First semester ends.

February 10, Tuesday—Second semester begins.

March 28, Saturday; April 5, Sunday—Easter vacation.

March 30, Monday—Graduating exercises of the School of Medicine.

March 30, Monday—Session of the School of Medicine ends.

April 11, Saturday, 8 P. M.—Students' recital.

April 27, Monday—All Senior parts to be filed with Registrar.

April 27, Monday—Final applications of graduate students who are candidates for degrees to be filed with Registrar.

May 1, Friday, 8 P. M.—Junior Exhibition.

May 18, Monday—Session of School of Law ends.

May 29, Friday—Memorial day; a holiday.

June 1, Monday—All theses for advanced degrees to be filed with Registrar.

June 3, Wednesday—Final examinations in the Academic Colleges begin.

June 14, Sunday, 11 A. M.—Baccalaureate Sermon.

June 15, Monday, 8 P. M.—Commencement Recital of the School of Music.

June 16, Tuesday, 10 A. M.—Field Day.

June 16, Tuesday, 2:30 P. M.—Class Day.

June 16, Tuesday, 7 to 8—Fern and flower procession.

June 16, Tuesday, 8:15 P. M.—Address before the University.

June 17, Wednesday, 9:30 A. M.—Alumni Day; business meeting.

June 17, Wednesday, 10 A. M.—Alumni class reunions.

June 17, Wednesday, 3 P. M.—University dinner to alumni and invited guests.

June 17, Wednesday, 9 P. M.—President's reception.

June 18, Thursday, 9:30 A. M.—Commencement Day.

THE REGENTS OF THE UVIVERSITY

NAME AND ADDRESS.	TERM EXPIRES
Hon. Cornelius C. Beekman, Jacksonville	April 1, 1903
Hon. Cyrus A. Dolph, Portland	April 1, 1903
Hon. William Smith, Baker City	April 1, 1905
Hon. Robert S. Bean, Salem	April 1, 1905
Hon. Charles Hilton, The Dalles	April 1, 1905
Hon. Samson H. Friendly, Eugene	April 1, 1907
Hon. Charles B. Bellinger, Portland	April 1, 1909
Hon. Nehemiah L. Butler, Monmouth	April 1, 1911
Hon. James W. Hamilton, Roseburg	April 1, 1913

OFFICERS OF THE REGENTS

Hon. Robert S. Bean, President.
Hon. Stuart B. Eakin, Treasurer.
Hon. Joshua J. Walton, Secretary

EXECUTIVE COMMITTEE

Hon. Samson H. Friendly, Chairman.
Hon. Charles B. Bellinger.
Hon. Cyrus A. Dolph

ADMINISTRATIVE OFFICERS.

THE UNIVERSITY

*FRANK STRONG, Ph. D. - - - President.

†PRINCE L. CAMPBELL, A. B. - - - President.

NANNA P. PADDOCK, - Registrar and Secretary to the President.

LOUIS H. JOHNSON, - - - - - - Steward and Superintendent of Buildings and Grounds.

THE COLLEGES AND SCHOOLS

JOHN STRAUB, A. M. - - - - - Dean of the College of Literature, Science and the Arts.

‡ARTHUR LACHMAN, Ph. D. - - - - - Dean of the College of Science and Engineering.

FREDERICK GEORGE YOUNG, A. B., - - - - - - - - - Dean of the Graduate School.

SIMEON EDWARD JOSEPHI, M. D. - - - - - - - Dean of the School of Medicine.

RICHARD HOPWOOD THORNTON, LL. B. - - - - - - - - Dean of the School of Law.

LUELLA CLAY CARSON, A. M. - - Dean of Women.

‡WALLIS GIFFORD NASH, - - Dean of School of Music

THE LIBRARY AND GYMNASIUM

CAMILLA LEACH, - - - - - Librarian.

CHARLES ARTHUR BURDEN, - Director of the Gymnasium.

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*Resigned July 1, 1902.
†After July 1, 1902.
‡Resigned.

THE GENERAL FACULTY*

The Catalogue had to be sent to the printer before the Board meeting, June 17, at which time vacancies in the Faculty will be filled.

†FRANK STRONG, Ph. D.; A. B., Yale 1884; A. M., Yale 1893; Ph. D., Yale 1897,

President of the University.

PRINCE L. CAMPBELL, A. B., Harvard University.

JAMES FRANCIS BELL, M. D., L. R. C. P. (LONDON),

Professor of Materia Medica and Therapeutics.

OTTO SALY BINSWANGER, Ph. D., M. D.,

Professor of Chemistry and Toxicology.

LUELLA CLAY CARSON, A. M., University of Oregon and Pacific University,

Dean of Women and Professor of Rhetoric and English Literature.

THOMAS CONDON, Ph. D.; A. M. Pacific University; Ph. D. University of Oregon,

Professor of Geology.

†FREDERIC STANLEY DUNN, A. M.; A. B. University of Oregon 1892; A. B. Harvard University 1894; A. M. University of Oregon 1899,

Professor of Latin Language and Literature.

WILLIAM DAVID FENTON,

Lecturer on Medical Jurisprudence.

CHARLES FRIEDEL, Ph. D.; A. B. University of Wisconsin 1883; Student at University of Leipsic, 1887-89 and 1893-95; Student Johns Hopkins University, 1892-93; Ph. D. University of Leipsic 1895,

Professor of Physics.

*With the exception of the President, the Faculty are arranged in alphabetical order.

†Resigned to take effect July 1, 1902.

‡Resigned.

ANDREW JACKSON GIESY, M. D.,

Professor of Clinical Gynaecology.

WILLIAM BALL GILBERT, United States Circuit Court of Appeals,

Lecturer on Constitutional Law.

IRVING MACKAY GLEN, A. M.; Graduate California School of Elocution and Oratory, 1889; Graduate California State Normal School, San Jose, 1890; Graduate Elwood Conservatory of Music, 1890; A. B., University of Oregon, 1894; Graduate Student at Johns Hopkins University, 1894-96; A. M., University of Oregon, 1897,

Professor of English Language and Early English Literature.

BENJAMIN JAMES HAWTHORNE, A. M.; Randolph Macon College, 1861,

Professor of Psychology.

HERBERT CROMBIE HOWE, A. B., Cornell University, 1893; Graduate Scholar Cornell University, 1893-94,

Assistant Professor of English Literature.

HENRY E. JONES, M. D.,

Emeritus Professor of Clinical Gynaecology.

WILLIAM JONES, M. D.,

Professor of Clinical Surgery.

SIMEON EDWARD JOSEPHI, M. D.,

Dean of the School of Medicine and Professor of Obstetrics and Nervous Diseases.

EDMOND JOHN LABBE, M. D.,

Acting Professor of General Anatomy.

*ARTHUR LACHMAN, Ph. D.; B. S., University of California, 1893; Ph. D., University of Munich, 1895,

Dean of the College of Science and Engineering and Professor of Chemistry.

*Resigned.

GEORGE LILLEY, LL. D.; A. M., Washington and Jefferson College, 1878; A. M., Illinois Wesleyan University, 1882; A. M., Knox College, 1882; LL. D., Chaddock College, 1887,

Professor of Mathematics.

KENNETH ALEXANDER J. MACKENZIE, M. D., C. M., L. R. C. P. & L. R. C. S. (Edin),

Professor of Theory and Practice of Clinical Medicine.

EDWARD HIRAM McALISTER, A. M.; A. B., University of Oregon, 1890; A. M., University of Oregon, 1893,

Professor of Applied Mathematics and Engineering.

HENRY H. NORTHUP, LL. B., Columbia University, 1868,

Lecturer on Pleading.

RICHARD NUNN, A. B., B. C. H., M. D.,

Professor of Diseases of Eye, Ear, Nose and Throat.

*EDWIN DE VORE RESSLER, A. M., A. B., Otterbein University, 1891; A. M., Ohio State University, 1897.

Assistant Professor of Education.

CARL COSMO RICE, A. M.; A. B., University of Texas, 1897; A. M., 1899; A. M., Harvard University, 1900; Ph. D., Harvard University, 1902,

Assistant Professor of Romance Languages and Latin.

WILLIAM HENRY SAYLOR, M. D.,

Professor of Diseases of Genito-Urinary Organs and Clinical Surgery.

ALFRED F. SEARS, Judge of the Circuit Court of Multnomah County; A. B., Dartmouth College, 1875; LL. B., Boston University, 1877,

Lecturer on Equity.

JOSEPH SCHAFER, M. L.; B. L., University of Wisconsin, 1894; Instructor State Normal School, Valley City, North Dakota, 1894-98; Graduate Student Chicago University, Summer 1895; M. L., University of Wisconsin, 1899; Fellow, University of Wisconsin, 1900,

Assistant Professor of History.

*Resigned.

FRIEDRICH GEORG G. SCHMIDT, Ph. D.; Student at University of Erlangen, 1888-90; Student at Johns Hopkins University, 1893-96; University Scholar, 1894-95; Fellow, 1895-96, and Ph. D., 1896,

Professor of Modern Languages and Literatures.

HENRY DAVIDSON SHELDON, Ph. D.; A. B., Stanford University, 1896; A. M., Stanford University, 1897; Instructor in Pedagogy, Stanford University 1896-97; Lecturer in Education, Clark University Summer School, 1898-99; Ph. D., Clark University, 1900,

Assistant Professor of Philosophy and Education.

GEORGE BURNSIDE STORY,

Professor of Physiology.

JOHN STRAUB, A. M.; A. B., Mercersburg College, 1876; A. M., Mercersburg College, 1879,

Dean of the College of Literature, Science and the Arts and Professor of Greek Language and Literature.

ALBERT RADDIN SWEETSER, A. M.; A. B., Wesleyan University, 1884; A. M., Wesleyan University, 1887,

Professor of Biology.

RICHARD HOPWOOD THORNTON, LL. B., Georgetown,

Dean of the School of Law, and Professor of the Common Law and the Law of Contracts and Evidence.

ERNEST FANNING TUCKER, A. B., M. D.,

Professor of Gynaecology.

GEORGE MILTON WELLS, M. D.,

Professor of Paediatrics.

JOHN WILLIAM WHALLEY,

Lecturer on Pleading.

HOLT COUCH WILSON, M. D.,

Professor of Principles and Practice of Surgery.

GEORGE FLANDERS WILSON, M. D.,

Professor of Military and Operative Surgery and Clinical Surgery.

FREDERIC GEORGE YOUNG, A. B.; Johns Hopkins University, 1886; University Scholar, Johns Hopkins University, 1886-87,

Dean of the Graduate School and Professor of Economics and Sociology.

CAMILLA LEACH,

Librarian.

INSTRUCTORS, ASSISTANT INSTRUCTORS AND OTHER OFFICERS

CHARLES W. M. BLACK, Ph. D.; A. B., Dickinson College, 1889; A. M., 1892; A. M., Harvard University, 1899; Ph. D., Harvard University, 1901,

Instructor in Mathematics.

CHARLES ARTHUR BURDEN,

Director of Physical Education.

RICHARD HAROLD DEARBORN, B. S.; A. B., Portland University, 1895; B. S., Cornell University, 1900,

Instructor in Electrical and Mechanical Engineering.

EDWARD PAYSON GEARY, M. D.,

Lecturer on Physical Diagnosis.

ALBERT EDWARD MACKAY, M. D.,

Lecturer on Bacteriology.

ALEXANDER DONALD MACKENZIE,

Lecturer on Clinical Medicine.

IDA BEL ROE, A. B., University of Oregon, 1897.

Instructor in English.

LOUIS ARTHUR SHANE, M. D.,
Assistant Demonstrator of Anatomy.

ANDREW CHARLES SMITH, M. D.
Lecturer on Clinical Surgery.

ORIN FLETCHER STAFFORD, A. B., University of Kansas, 1900,
Instructor in Chemistry.

JAMES CULLEN ZAN,
Lecturer on Dermatology.

CORTES HOLIDAY WHEELER, M. D.,
Lecturer on Hygiene.

JAMES OSCAR WILEY, M. D.,
Lecturer on Osteology and Syndesmology.

ROBERT CLARK YENNEY, M. D.,
Lecturer on Histology and Pathology.

PERCY PAGET ADAMS, A. B., University of Oregon, 1901,
Assistant Instructor in Civil Engineering.

ARTHUR L. FRAZER,
Assistant Instructor in the School of Music.

BERTHA ELLSWORTH SLATER, A. B., University of Oregon, 1899,
Assistant Instructor in Rhetoric and English Literature.

WALTER LINCOLN WHITTLESEY, A. B., University of Oregon, 1901,
Assistant Instructor in Economics.

PETER IRVING WOLD, B. S., University of Oregon, 1901,
Assistant Instructor in Physics.

SPECIAL UNIVERSITY LECTURES

DR. J. A. BEATTIE, *President of Eastern Oregon State Normal School.*

Subject: The Need of Eucation in Our Country.

HON. STEPHEN J. LOWELL, *Attorney, Pendleton.*

Subject: Law and Lawyers, Then and Now.

ERNEST HOFER, *Editor Capital City Journal, Salem.*

Subject: Municipal Finance.

HON. J. H. ACKERMAN, *State Superintendent of Public Instruction, Salem.*

Subject: The New Education.

REV. ALEXANDER BLACKBURN, *Pastor First Baptist Church, Portland.*

Subject: Three Years With the Army of the Cumberland, 1862–5.

PROF. R. C. FRENCH, *Principal of Training School, State Normal School, Monmouth.*

Subject: A Trip Through England and Scotland, with Illustrations.

REV. A. W. ACKERMAN, *Pastor First Congregational Church, Portland.*

Subject: The Bliss of Ignorance.

DR. STEPHEN S. WISE, *Rabbi, Portland.*

Subject: Israel's Gifts to the World.

DR. WILLIAM A. MOWRAY, *Boston.*

Subject: Napoleon's Easter, 1803, and What Came of It.

COMMITTEES OF THE FACULTY*

THE UNIVERSITY COUNCIL.—Consisting of the President of the University and all the full professors and assistant professors of departments at Eugene, who together constitute the legal Faculty of the University.

THE ACADEMIC COUNCIL—The Executive Committee of the University Council—the President, Deans Young, Straub, Lachman and Carson and Professor Friedel.

THE GRADUATE COUNCIL—Dean Young, Professors Lilley, Schmidt, Glen and Assistant Professor Howe.

UNIVERSITY EXTENSION—Assistant Professor Sheldon, Professors Dunn and Schmidt and Assistant Professor Ressler.

ATHLETICS—Professor Hawthorne, Mr. Burden, Professors Lilley, Young and Glen.

CREDENTIALS—Deans Lachman and Young and Assistant Professor Ressler.

APPOINTMENTS—Professors McAlister, Washburn, Carson, Hawthorne and Straub.

EXAMINATIONS AND SENIOR CREDITS—Professors Lilley, Glen and McAlister.

SPECIAL STUDENTS—Professors Carson, Young and the President.

PUBLICATIONS—Professors Friedel and Glen, Dean Young and Assistant Professor Sheldon.

LIBRARY —Hon. R. S. Bean, President of the Board of Regents, and the Librarian.

ADVISORY—The President, Deans Young and Lachman, Professor McAlister and Assistant Professor Schafer.

STUDENT AFFAIRS—Professors Hawthorne, Glen and Dean Carson.

*The President of the University is ex-officio a member of all Committees.

THE UNIVERSITY

The University of Oregon comprises the following colleges and schools:

THE GRADUATE SCHOOL.

THE COLLEGE OF LITERATURE, SCIENCE AND THE ARTS:
- The General Classical Group.
- The General Literary Group.
- The General Scientific Group.
- The Civic Historical Group.
- The Philosophical–Educational Group.
- The School of Commerce.
- Collegiate Courses—
  1. Law and Journalism.
  2. Course for Teachers.

THE COLLEGE OF SCIENCE AND ENGINEERING:
- The School of Applied Science.
- The Courses Preparatory to Medicine and Dentistry.
- The School of Engineering.

THE UNIVERSITY ACADEMY.

THE SCHOOL OF MUSIC.

THE SCHOOL OF MEDICINE, at Portland.

THE SCHOOL OF LAW, at Portland.

THE GRADUATE SCHOOL.—In each of the colleges there are advanced courses leading to second and third degrees. These courses are open to graduates of any reputable college, upon presentation of diploma, provided the preparation of the candidate is satisfactory to the Graduate Council.

THE COLLEGE OF LITERATURE, SCIENCE AND THE ARTS contains the general groups of studies leading to the degrees of Bachelor of Arts. Each group covers four years.

THE SCHOOL OF COMMERCE will offer a four years' course, with special reference to administration of large commercial and manufacturing interests.

THE COLLEGIATE COURSE IN LAW AND JOURNALISM prepares for the study of law, and special training in history and economics in preparation for journalism.

THE TEACHERS COURSE is an advanced course for those intending to fit themselves for positions of supervision and teaching in departments of higher education.

THE COLLEGE OF SCIENCE AND ENGINEERING contains the courses in science and engineering that lead to the degrees of Bachelor of Science and Civil, Sanitary, Electrical and Mining Engineer. These courses cover four and five years.

THE COURSES PREPARATORY TO MEDICINE AND DENTISTRY cover two and four years respectively and prepare students for the School of Medicine of the University of Oregon and other standard schools. The course enables students to anticipate one year of the course in the Schools of Medicine and Dentistry.

THE SCHOOL OF MINES AND MINING offers advanced work in mining, especially with reference to the applications of chemistry and electricity to mining.

THE UNIVERSITY ACADEMY is the preparatory department of the University, and is a part of the University. It now covers the eleventh and twelfth grades of the public high school. In order to fully enter the lowest class of the University Academy, the student must have finished the tenth grade of the high school, but, by the rules of the Board of Regents, students may be admitted who have finished the tenth grade *conditioned in not more than two subjects.*

The University has, therefore, made arrangements with the Eugene High School to give students, who have finished part of the work of the tenth grade, instruction in the rest of the tenth grade work until the high schools of the state have increased the number of their grades. Students, then, may enter the University under the above arrangements.

THE SCHOOL OF MUSIC offers instruction in various branches of instrumental and vocal music and in the theory of music.

THE SCHOOL OF MEDICINE offers a course covering four years, one of which may be anticipated by the Courses Preparatory to Medicine. The degree M. D. follows the course in the School of Medicine.

THE SCHOOL OF LAW offers a two years' course leading to the degree of Bachelor of Laws.

HISTORY AND ORGANIZATION

The University of Oregon is an integral part of the public school system of the state, and embraces (exclusive of the University Academy and the Graduate School) the thirteenth, fourteenth, fifteenth and sixteenth grades of the public school system. The University simply finishes the work begun in the grammar and public schools and continued in the high schools.

Practically the institution opens its doors to all the sons and daughters of the state, and to all students, wherever their homes, without discrimination. The broad, helpful spirit of a real university is seen in its organization and its provision for meeting as many of the needs of the young men and women of the state as possible, provided only they are prepared for the courses offered.

The University of Oregon was founded by legislative act in 1872, by which act the University was located at Eugene. Regular instruction began in 1876. Eugene is 125 miles south of Portland, on the Willamette river and at the head of the Willamette valley. It is on the direct line of the Southern Pacific railroad. Eugene is the county seat of Lane county, has 5,000 population a large high school and excellent grammar schools. The church and society privileges for students are excellent, and the cost of living is low.

BUILDINGS AND GROUNDS

The University campus is in the southeastern part of Eugene, and covers twenty-seven acres. It is beautifully situated on rising ground, close by the Willamette river, with both the Cascade and Coast ranges in full view.

The following buildings are located upon the University grounds:

Deady Hall, a three-story brick building, with basement. It was erected and presented by the citizens of Lane county to the state, and named in honor of the late Matthew P. Deady, the first President of the Board of Regents. It contains the biological and physical laboratories. It also has the departments of Latin, Greek, French and German, together with the halls of the literary societies. In the basement is the gas plant of the laboratories, and the private laboratories of the Professor of Physics and of the Department of Physics. The Y. M. C. A. and Y. W. C. A. reception and reading

room is also located in Deady Hall, to which students are cordially welcome.

Villard Hall was named in honor of Henry Villard, of New York city, the greatest benefactor of the University. It is an imposing cemented brick building, and contains the offices of the President, the Registrar, the Steward, the Assembly Hall of the University, the very valuable geological collection, and the departments of English Literature, Early English Literature and Oratory, History, Economics and Sociology, Geology and Mathematics.

McClure Hall was built in 1900. It was equipped in the spring of 1901 at a cost of nearly $7000, and is admirably adapted to its purpose. It has three floors, with laboratory facilities for 200 students, and will contain the latest appliances for the highest research work in all lines of mining and manufacturing chemistry. It has hoods and ventilators for carrying off gases, and conforms in its arrangement to the most approved methods in the modern teaching of chemistry. It will contain all of the departments of Chemistry, and will make possible a great expansion in mining, metallurgy and assaying. The upper floor will for the present be used as classrooms in philosophy and education, in history, psychology and also for the psychological laboratory.

The Dormitory, a three-story brick building, affords accommodations for about seventy young men. The rooms are well lighted and ventilated, and will accommodate two students. The whole building is heated by steam and lighted by electricity. The rent for each room is $11.25 per term, payable in advance at the office of the Steward. This for the present includes light and heat, and furniture, except bedding. When two students occupy a room, the cost is reduced to one-half the above for each person. Students get table-board in private families in clubs to suit individual tastes. Students desiring rooms are advised to apply at once to the Steward.

The Dormitory also contains the general Library, the reading-rooms, the music rooms and the drawing room.

Collier Hall, the President's House, is situated upon the part of the campus south of Thirteenth street, and is surrounded by grounds covering nine and one-half acres.

The University operates its own electric light and water plants, and gas plant for furnishing gas for the chemical, physical and biological laboratories.

The Gymnasium is a brick building of fair size, well equipped for indoor athletic work.

THE POWER PLANT AND HALL OF ENGINEERING was finished in November, 1901. It contains the boilers from which all the present buildings on the campus are heated. It also contains the dynamos and appliances of the electric light plant and the pumping apparatus for supplying the University with water. The shops, both wood and iron, are located in this building, as is the forge shop. All the shop work in electrical and mechanical engineering is done here, and the facilities in this line are much greater than ever before.

A WEATHER STATION is located on the campus, from which regular reports are sent to the chief weather observer at Portland.

GENERAL INFORMATION

The University year consists of forty weeks, beginning in 1902 on Wednesday, the 17th of September. Commencement Day occurs on Thursday, June 18, 1903. The year is divided on the semester plan.

REGISTRATION

Students are required to present themselves immediately upon arrival at the office of the Registrar, in Villard Hall, for the purpose of registration. By a rule of the Board of Regents, no student can register without having first paid the incidental fee. Students will register for the number of hours required in their course or group.

TUITION AND FEES

There is no tuition at the University of Oregon. The incidental fee, payable each year by students in all departments of the University, is $10.00. There is also a Student-Body tax of $2.50 per year for the support of student enterprises. The fees in the School of Music vary with the instruction.

A diploma fee of $10.00 is charged for the first degree taken, and of $10.00 for each succeeding degree. The rules prescribe that no person shall be recommended for a degree until he has paid all dues, including the diploma fee.

In all laboratory courses, in whatever department, a deposit is required to cover waste and breakage. At the end of the year the balance of the deposit, over and above waste and breakage, will be returned to the student. The amount of the deposit varies according to the courses taken.

EXPENSES

The expenses for one person for a year vary according to the circumstances of the case, but in general are very low. The following estimate is probably substantially accurate: Room, from $ .30 to $1.50 per week; board from $2.50 to $4.00 per week; books from $5.00 to $12.00 per year. Many students rent rooms and do light housekeeping, thus reducing the cost of living to a very low point. A fair estimate of the yearly expense of those who hire lodgings and board, either in the Dormitory or outside, is $125.00 per year and upward. For those who do light housekeeping the cost is materially less. Students should plan, however, upon incidental expenses for entertainments, society dues, athletic subscriptions, etc.

Parents expecting to come to Eugene to live while their children attend the University, or expecting to send members of their families to rent rooms and do light housekeeping, are invited to address the President of the University or the Dean of the College of Literature, Science and the Arts, or the Dean of Women, who will render all the assistance possible.

REMUNERATIVE EMPLOYMENT

There are many ways of earning money while at the University, and in general no young men or women with determination and sufficient preparation, even if they and their people are destitute of funds, need hesitate about entering the University. The University employs a considerable number of students. Others are employed in the Dormitory. There is opportunity for young men or women to help themselves by employment in private families, as stenographers and typewriters, in offices and stores. Students looking for such work should be on the ground early, ready to take advantage of any opening. Address the President of the University, the Deans of the Colleges, the Dean of Women, or the Secretaries of the Y. M. C. A. and Y. W. C. A.

GOVERNMENT

The government of the institution rests upon the inherent obligations of students to the University and to the state. The

University is maintained at the public expense for the public good. Those who participate in its benefits are expected, as a matter of honor, not only to fulfill the obligations of loyal members of the institution, of the community, and of the commonwealth, but actively to aid in promoting intellectual and moral interests. Every student owes to the public a full equivalent for its expenditure in his behalf, in the form of superior usefulness to it, both while in the institution and afterwards. Students, therefore, can not claim any exemption from the duties of good citizens and loyal members of the community and of the University; on the contrary, they are under peculiar obligations loyally to fulfill every duty. As members of the institution, they are held responsible for regular attendance and the proper performance of their duties The interests of faithful students and the well-being of the University demand that those who do not conform to these manifest obligations should withdraw from the institution or be excluded. As members of the community, students are amenable to the law; and, if guilty of its infraction, are liable to a termination of their relations with the University. The University recognizes its civic relations and rests its administration upon civic obligations.

STUDENT SOCIETIES

RELIGIOUS

YOUNG MEN'S CHRISTIAN ASSOCIATION

The Young Men's Christian Association has commodious rooms in Deady Hall. It endeavors to promote growth in grace and fellowship among its members, and stands for Christian life and work in the University. It holds regular prayer meetings on Wednesday evenings at 6:45 o'clock.

The Y. M. C. A. will offer two special courses in New Testament study. They will be given by young men of the Association, under the supervision of some members of the Faculty:

1. The Life and Teachings of Christ, from Sharman's Studies in the Life of Christ and Stevens & Burton's Harmony of the Gospels.

2. The Acts and the Epistles from Bosworth's Studies in the Acts and Epistles, and Burton's Records and Letters of the Apostolic Age.

The Association maintains an employment bureau in connection with the Administrative Office, the services of which are free to stu-

dents in all departments of the institution. In making application for assistance in this line, applicants should state:

1. The kind of work in which they have had experience.
2. The kind they would accept.
3. The amount of time they can give to it.
4. The proportion of the expenses which they must earn.
5. The college and class they expect to enter.

The Association has a committee to help students to find comfortable rooms and boarding places. Students will be more apt to secure rooms as they desire them if they send word before coming to the University, telling the price they wish to pay.

A Student's Handbook, containing items of information especially valuable to new students, is issued at the end of the college year. A copy will be sent free to any address. Apply to the General Secretary.

Address all inquiries to the General Secretary of the Y. M. C. A. of the University of Oregon, Eugene, Or.

THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION

was organized in March, 1894. Its purpose is to crystallize the Christian element in the University, and make the influence of that element felt among all the young women. Its social function is an important part of its work. New students are met as they come from the trains, and everything is done to make them welcome. Informal prayer meetings are held every Wednesday afternoon at 3:00 o'clock in the Association parlors. Officers are chosen the first week in January to serve one year. Any young woman wishing information in regard to the University is invited to correspond with the General Secretary of the Association, or Professor Luella Clay Carson, Dean of Women, who is actively interested in the Association.

Parents and pastors are urged to write the President of the University when young men and women are coming to the University, that they may be met and assisted in finding homes and introduced to congenial University life. Every endeavor is made to surround students with the best influences of refinement and Christian culture.

LITERARY

THE LAUREAN AND EUTAXIAN CORPORATION,

composed of the Laurean and Eutaxian Societies, was organized

with a state charter, 1877. It was organized to further the literary interests of the Societies and the University. It has a hall in which the two societies meet, and a well selected library of several hundred volumes. The corporation elects annually a corps of officers, whose duty it is to look after the interests of the library of the organization.

PHILOLOGIAN SOCIETY

The society was organized October 21, 1893. Its object is to discuss questions of general interest, and to secure for its members proficiency in debate and a thorough knowledge of parliamentary usage. The usual exercises are a declamation, an extemporaneous address on some current topic, a prepared address of fifteen minutes, and a debate open to all members, with leaders appointed two weeks in advance. The officers are elected for a term of ten weeks, and the meetings are held in the physical lecture room at 7:30 on Friday evenings.

SCIENTIFIC

THE CHEMICAL SOCIETY

The Chemical Society of the University of Oregon was organized in April, 1900, and is continued as a seminary for advanced students in chemistry.

ACADEMY OF SCIENCE

A scientific society, organized January 10, 1896, and composed of the scientific members of the Faculty, advanced students, and others interested in science. Meets once a month for presentation of papers, discussions, etc.

BIOLOGICAL CLUB

Open to advanced students in the department of Biology. Meets informally once in two weeks, at the home of the instructor, to discuss current biological literature and to read standard works pertinent to the subject.

HISTORICAL

An Historical Seminary is held every second week for advanced students in history. Methods of research and criticism are studied

and research work in local Oregon history and in the history of the United States will be taken up.

ATHLETIC

THE ATHLETIC ASSOCIATION

The Athletic Association of the University of Oregon, which was organized in 1894, exercises control over all athletic interests of the University. Under it was organized in 1894 a football team, and in 1895 a track athletic team. In addition to these, the University is represented by a baseball nine, a golf club, a basket-ball team, a tennis club and an indoor baseball club.

The University of Oregon has also formed an Inter-State Athletic Association with the University of Washington, and annual meets will be held.

MUSICAL

THE UNIVERSITY OF OREGON GLEE CLUB

The club is a student organization, open to all students who are successful in the tryout held during the first week of each University year.

A yearly Thanksgiving concert is given by the club, and a tour is usually made during the Christmas holidays by a team of sixteen, selected by the director. During the season of 1901-02 the club made a successful tour of the principal cities of the Willamette valley.

The yearly election of officers is held at the beginning of each school year. All officers except the director are chosen from the membership of the club.

The club is under the direction of Irving M. Glen, Professor of Early English Literature, who is also baritone soloist of the club.

TREBLE CLEF

The Treble Clef, a musical club for women, was organized during the year 1900. It consists of sixteen voices, four on each part, and is under the direction of Miss Hansen and Mr. Nash. Regular practice is held throughout the year, and an annual concert is given just before the Christmas holidays.

MISCELLANEOUS

SOCIETAS QUIRINALIS

A classical club composed only of advanced students in Greek and Latin, for the purpose of furthering and fostering the pursuit of classical studies and for the social intercourse of students in this department of work. The Quirinalis meets on the first Tuesday of each month during the college year, social sessions alternating with public lectures and meetings, at which papers on special topics are read by selected members.

UNIVERSITY ASSEMBLY

A general assembly of the University is held each Wednesday at 9:50 A. M. Appropriate exercises are held and interesting and important addresses made by invited guests, or the President or members of the Faculty of the University.

UNIVERSITY LECTURES AND RECITALS

Frequent lectures by invited guests from Oregon and other states are given to students upon subjects of an entertaining and instructive nature allied to the courses given in the University. These lectures are by those fitted by training and experience to speak with authority. The lectures occur on Tuesday evenings at 8:00 o'clock.

The School of Music gives recitals at stated times during the year, which are entertaining and enjoyable and to which students of the University and others are invited.

ALUMNI ASSOCIATION

The Alumni Association of the University of Oregon was organized in 1879. The membership consists of all the graduates of the literary departments of the University. The objects of the association are "to advance the cause of higher education, to promote the interests of the University of Oregon, and to encourage mutual acquaintance and good-fellowship among the alumni."

STUDENT BODY

The Student Body exercises general control over all student affairs within the University. The general management of its affairs

is entrusted to an Executive Committee, consisting of a President, Vice President and Secretary. Officers are elected at the beginning of the first semester of each college year.

UNIVERSITY AFFILIATION

The University of Oregon is completing arrangements for a close affiliation of other colleges and universities of the state with itself, whereby their graduates shall pass into the State University upon graduation, with a specified number of credits, and without examination. Such graduates may then pursue advanced courses, either in the Graduate School, or elsewhere, with or without being candidates for a degree.

It is hoped to come into cordial relations with every high school or academy, and with every other college or university in the state. Registrars of other collegiate institutions are invited to address the President of the University to this end.

APPOINTMENT OF TEACHERS

The University, through the proper committee conducts an Appointment Bureau for the recommendation of teachers to school officers and superintendents desiring capable teachers. Only such teachers as are graduates of or students in the University, and especially such as are members of the Department of Philosophy and Education will be recommended. The University has many calls for competent teachers at good salaries which it is not able to meet because of lack of material at the University. These calls are for principals as well as teachers, and the demand is almost always in excess of the supply. This will probably be more and more true because of the rapid development of high schools in the state and of the general school system calling for men and women experienced as principals and superintendents.

School Officers are invited to correspond with Professor E. H. McAlister, the Chairman of the Appointment Committee of the University Faculty. All such assistance will be without any expense whatever to school officers and students.

UNIVERSITY EXTENSION

With a view to the extension of the advantages of the University to teachers and other persons whose engagements will not permit

of residence at the University, extension courses of instruction will be offered.

Persons who offer to do systematic work in these courses, and to take examinations in them, will be enrolled as Attendants upon Extension Courses. Attendants who pass satisfactory examinations are entitled to receive from the University Certificates of Record of the work done, which may be credited to them upon their scholarship records, if they subsequently become students of the University.

The University Extension Department of the University of Oregon, as at present organized, carries on its work in giving instruction at a distance from the University in two ways: First, by courses of lectures delivered in person by University instructors; and, second, by individual instruction by correspondence.

I. UNIVERSITY EXTENSION LECTURES

University Extension lectures are lectures delivered by University professors and instructors on subjects which they treat in their regular classes.

Under the system adopted by the University of Oregon, the University Extension lectures are delivered only in courses of six lectures. The purpose of delivering the lectures in courses is to concentrate attention upon one subject.

A printed syllabus, free to each student, will give an epitome of the subject considered, an analysis of each lecture, references to the best books on the subject, and other helpful suggestions.

The class, which is held before or after each lecture, furnishes the student an opportunity to question the lecturer and to have special difficulties explained. In the class, the lecturer will take the opportunity to elaborate his subject or to emphasize its salient features.

The lecturer will hold at the end of the course a written examination, which may be taken only by those who have attended the lectures and classes, read the required books and sent in the required papers.

II. INSTRUCTION BY CORRESPONDENCE

It should be clearly understood that instruction by correspondence is by no means regarded as the equivalent of residence study. It is not so valuable to the student. Experience has shown, however, that earnest students may do good work at a distance from the University when guided by competent instruction by correspondence.

There are in every locality teachers, ministers, and men and women of various vocations, who are carrying on the study of certain subjects alone, and who would be glad to avail themselves of the guidance of a University instructor. There are others who would take up and prosecute some line of study if they could have competent guidance, but who do not feel able to carry on any study without guidance. Some are looking forward to a college course and would like to prepare themselves for admission; others would like to do a part of the college work in absence, thereby shortening the time of residence required for a course. For these various classes of persons and all others who desire to receive guidance in some line of study by correspondence, whether with a view to receiving University credit or not, the University of Oregon offers instruction by correspondence.

UNIVERSITY CREDIT FOR WORK DONE BY CORRESPONDENCE

1. When a student has completed any course of study by correspondence satisfactorily to the instructor, he will be given a certificate for the work done.

2. If he wishes this work to count on the books of the University toward a degree, he must pass the regular examination for admission to one of the regular courses or groups of the University. He must also pass, ordinarily at the University, a special examination on the work done by correspondence.

3. For the Bachelor's degree not more than one-half of the required work may be performed by correspondence.

4. For the Master's degree not more than one-half of the required work may be performed by correspondence, except in the case otherwise provided for of the Master's degree *in absentia*.

5. For the Doctor's degree not more than one-third of the required work may be performed by correspondence.

EXPENSES

1. Extension Lectures: The expenses of the lecturer and ten dollars per lecture, which is less than the usual fee.

2. Instruction by Correspondence: The fees vary according to the amount of work taken.

All fees are payable in advance.

For particular information about any point address the Presi-

dent of the University or Assistant Professor H. D. Sheldon, the Chairman of the Committee on University Extension, University of Oregon, Eugene, Oregon.

PRIZES AND HONORS

The following prizes in Oratory are annually offered:

The Failing Prize, not to exceed one hundred and fifty dollars, is the income from a gift of twenty-five hundred dollars made to the University by Hon. Henry Failing, of Portland. It is awarded "to that member of the Senior Class in the Classical, the Scientific, or the Literary Course prescribed by the University, or such courses as may, at the time, be substituted for either of said courses, who shall pronounce the best original oration at the time of his or her graduation."

The Beekman Prize, not to exceed one hundred dollars, is the income from a gift of sixteen hundred dollars made to the University by Hon. C. C. Beekman, of Jacksonville. It is awarded under the same conditions as the Failing prize, for the second-best oration.

Candidates for the B. A. or B. S. degrees, whose average scholarship during their Sophomore and Junior years has not fallen below C, may compete for the Failing and Beekman prizes if they have complied with the following conditions: Two years' residence at the University; the Junior and Senior courses in orations; two courses in public speaking above Course 1.

Three type-written copies of the competing orations, signed with an assumed name (the real name being filed at the same time in a sealed envelope), must be in the hands of the Academic Council on the first Monday in April.

Honors will be assigned to graduates as follows:

Students shall graduate *summa cum laude* when at least half their credits rank A and none rank below B; *magna cum laude* when no credits rank below B; *cum laude* when at least half their credits rank B and none below C; when a student's credits rank lower than any of the above he graduates *rite*. The matter of honors is now in the hands of a committee of the Faculty and is subject to change.

LIBRARY AND READING ROOM

The Libraries of the University will at the end of 1902 contain

about 16,000 volumes. The growth of the General Library has been slow, because of inadequate funds, but for the year 1900–01 the full income of the Villard Fund was used for the Library. It is hoped that this will be made permanent. Numerous and valuable additions, however, have been made to the Library this year. The Dewey system of classification has been adopted, and a card catalogue enables students to make ready use of the books. The Library is a depository for all documents published by the Government at Washington, and receives a large number every year.

Special Department Libraries are being accumulated which are provided with reserve shelves in the General Library. Poole's Index and the annual library indexes have been provided, and there is a valuable collection of bound periodicals. The list of encyclopedias and strictly reference books numbers over 200 volumes. The Literary Societies of the University have accumulated libraries of considerable value, which are accommodated in special alcoves of the General Library. The Society Libraries number nearly 1,000 volumes.

The General Library is especially strong in economics and history. Instructors in the University, students and resident graduates are entitled to draw books from the Library. To others it is a Reference Library only. Students may draw three volumes at a time, to be retained for three weeks, with the privilege of one renewal. The Library is open every day during term time, from 8:30 A. M. to 5 P. M., and on Saturday from 8:30 A. M. to 12:00 M.

The University Reading Room contains a large assortment of American and foreign newspapers and periodicals. The number will be added to as rapidly as the funds permit. They now include weekly and monthly magazines and reviews on General Literature, Sociology, Political Science, History, Economics, Chemistry, Biology, Physics, Engineering, Education, Philosophy, Psychology, French and German, etc.

The reading room will be open every day in term time, from 8:30 A. M. to 5 P. M., excepting Sunday.

PUBLICATIONS

The Oregon Weekly is published each Monday during the College year by the Eutaxian, Laurean and Philologian Literary

Societies. The paper is devoted to general college news, and aims to keep the students, faculty and alumni posted concerning the every-day happenings at the University and neighboring institutions.. The staff consists of an editor-in-chief, with two associate editors, and a managing editor, with two assistants. The various members of the staff are elected by the three Literary Societies at the beginning of the second semester of each year. The general management of the paper is entrusted to an executive committee, consisting of one member from each Society.

THE UNIVERSITY OF OREGON MONTHLY is a monthly magazine published by the student body of the University. It is confined to literary articles written by students, alumni and other persons connected with the institution. The aim of the Monthly is to arouse and cultivate among the students practical literary ability; and also to serve as a medium between the University and its alumni and friends.

UNIVERSITY BULLETINS

The University expects to put out during the coming year and hereafter, bulletins for schools in the state on Nature Study, Chemistry, Botany, Physics, English and History. It will be the purpose of these bulletins, written by specialists in their various lines, to suggest material and methods, reference or text books, and apparatus, i. e., what ought to be purchased first, where it may be had cheapest, with prices, or how it may be made at home. In English, lists of classics published in inexpensive form, tabulated approximately as to grades, will be given; and in History, selections from the sources will be undertaken, suitable for use in high schools and colleges.

GRADUATE SCHOOL

FACULTY

The faculty of each school or college consists of the President of the University, and the resident professors and other teachers giving instruction in the college.

ORGANIZATION

The graduate School of the University of Oregon was organized

to offer advanced instruction upon the basis of work completed in the College of Literature, Science and the Arts, the College of Science and Engineering, and the School of Mines and Mining. It meets the threefold purpose of extending general culture, for which the degree Master of Arts is granted; of encouraging the mastery of a specialty, for which the degrees of Master of Science and of Doctor of Philosophy and the different Engineering degrees are granted; and of providing for those who desire a more thorough acquaintance with particular subjects than is offered in undergraduate work, but are not candidates for degrees.

ADMISSION

Graduates of this University, or of other colleges or universities regularly authorized to grant Bachelors' degrees, and others who can give satisfactory evidence that they have an equivalent preparation, are admitted to the Graduate School on the recommendation of the President and the Graduate Council; Provided always, that the President and Council may prescribe for the candidate such preliminary work as they may deem necessary for entrance upon his course.

The candidate shall present his diploma and other credentials to the President and Council with an application showing his proposed work, as approved by the heads of the departments in which his major and minor subjects lie.

REGISTRATION

The applicant shall, in order to register, file with the Registrar his registration card granted by the Council, and pay the incidental fee of ten dollars.

DEGREE OF DOCTOR OF PHILOSOPHY

Beginning with the year 1900-1901, the degree of Doctor of Philosophy was opened to graduate students under the following conditions:

1. The candidate must be a baccalaureate graduate of this University or of a college or university whose degrees are accepted as equivalent to its own; or he must give satisfactory evidence to the Graduate Council that he possesses an equivalent preparation for graduate work.

2. He must make application to the Dean of the Graduate School before the 1st day of October preceding the commencement at which he intends to present himself for the degree, and must then give satisfactory evidence of his ability to read such German and French as may be necessary for the proper prosecution of his studies.

3. He must have spent at least three full college years in graduate work at this or some other approved university; the last year must be spent as a resident student of this University. The time spent in attaining the degree A. M. may be counted toward satisfying this time condition.

4. He must present a thesis showing the results of original research of a high character, and must pass acceptable examinations, both written and oral, in one chief or major study and two allied, subsidiary or minor studies, not more than two of which may be in the same department. The oral examination shall be before the Faculty of the Graduate School, where he may be required to defend his thesis. The thesis, embodying the results of original research in some subject connected with his major study, must be presented to the head of the department in which the work was done not later than the 1st of May preceding the commencement at which the degree is to be conferred, and if approved by him is to be placed on file for inspection in the Library for at least two weeks. If finally approved, not less than 100 printed copies must be delivered to the Librarian of the University, before graduation, or proper security be given for the printing of that number; Provided, that if the thesis has already been printed ten copies only shall be deposited with the Librarian.

THE MASTER'S DEGREE

The Degree of Master of Arts or Master of Sciences will be granted only after at least one full year's graduate work. The cadidate must have completed with *high credit* seventeen hours per week or their equivalent chosen from the courses of graduate study; other courses may be offered only by the special consent of the departments concerned, and with the approval of the Graduate Council; but courses for which a professional certificate or diploma is given will not be counted toward this degree. Work may be confined to a single department, and may not be distributed among more than three. Not later than the first of June preceding the commencement at which the degree is to be taken, he must present to the head of the department in which his major study has been a type-written thesis

which must embody scholarly research on some topic connected with that study. The thesis must be favorably passed upon by a committee made up of the heads of departments in which he has worked. The candidate must, before the degree is granted, pass a satisfactory examination, either oral or written, and, if required, before the committee which passed on his thesis.

Until further notice, in exceptional cases the degree of Master of Arts will be granted for work *in absentia* to those who fulfill the conditions for entrance to the Graduate School and pay the incidental fee, provided the candidacy be approved by the President and Graduate Council; that the proposed outline of work cover a full college year, and be approved in advance by the department concerned; that the candidate shall present himself at the University for examination, deposit a type-written thesis embodying scholarly research, and pay the diploma fee.

ENGINEERING DEGREES

Bachelors of Science in Engineering of this University, or other colleges or universities of equal rank, may receive at the expiration of one additional year of study the professional degree of Civil Engineer, Electrical Engineer, Chemical Engineer or Mining Engineer, whichever is appropriate to the undergraduate course, in accordance with the rules laid down for the five-year courses in the College of Science and Engineering.

Bachelors of Science in Engineering may receive the professional degrees named above without the additional year of study at the University, who have spent at least three years' actual time in professional practice in positions of responsibility, in the design, construction or operation of engineering works, and who shall furnish details of satisfactory evidence as to the nature and extent of this practice.

They must submit an engineering thesis accompanied by detailed explanations, drawings, specifications, estimates, etc., embodying the results of their work or observations. If approved, the thesis and all accompanying material shall be the property of the University. All theses for any degree must be delivered to the Dean of the College of Science and Engineering on or before the 15th day of May.

All candidates for degrees of any kind must upon being recommended for such degree pay the diploma fee.

COURSES OF STUDY

The Courses of Study offered to graduate students are given under the various departments of instruction.

Students contemplating graduate work are invited to address the President of the University or the Dean of the Graduate School.

FELLOWSHIPS AND SCHOLARSHIPS

A system of fellowships and scholarships has been established for departments needing additional assistance in instruction. The fellowships and scholarships are not gifts from the state to candidates, but provisions under which assistance may be rendered the University at the same time that the holder gains for these services necessary experience and a mastery of the line of work to which he is appointed.

1. Fellows and scholars may be appointed without stipend on the ground of high attainments. They shall be excused from the payment of all University fees and shall in return render services to the University in instruction or otherwise to not exceed two hours per week.

They shall preferably be called upon for necessary additional instruction, and shall then be paid for their services as stated below.

2. Fellowships may be awarded to candidates for higher degrees who shall have had at least one year of successful resident graduate work, along the special line in which the appointment is made, in this University or in some other institution of equivalent requirements. Fellows may be appointed by the Regents on recommendation of the President of the University, and the head of the department concerned. Each appointment shall be for one year, but may be renewed twice. The compensation for the actual service rendered in class instruction or otherwise, over and above the two hours before mentioned, shall be paid according to the character of the services, but in no case shall the amount exceed two hundred dollars per year.

3. Scholarships may be awarded to any candidate for a higher degree, and for exceptional reasons, to undergraduates, in the manner described above. The compensation for services rendered by scholars, over and above the two hours before mentioned, shall not exceed one hundred dollars per year.

THE COLLEGE OF LITERATURE, SCIENCE AND THE ARTS; THE COLLEGE OF SCIENCE AND ENGINEERING; THE SCHOOL OF MINES AND MINING.

THE FACULTY

The Faculty of each school or college consists of the President of the University and the resident Professors, Assistant Professors, Lecturers and Instructors giving instruction in the college.

REQUIREMENTS FOR ENTRANCE

There are two ways of entrance to the University: first, by examination; second, by recommendation from accredited schools without examination. All students from schools not accredited to the University are subject to examination at the University. The examinations will be held during the first week of the college year.

ENTRANCE OF HIGH SCHOOL STUDENTS INTO THE UNIVERSITY AND ACCREDITING OF HIGH SCHOOL WORK BY THE UNIVERSITY

The whole matter of accrediting all high school work, which heretofore has been in the hands of heads of departments of the University, has been put in the hands of the President of the University, after consultation with the heads of departments.

It will be the policy of the University to so adjust its standard of entrance requirements as not to be out of touch with the schools of the state that do earnest work, and at the same time to protect the scholarship of the University. It will also be the policy, as far as possible, to make the accrediting uniform for the various departments. Schools, therefore, that have a nine months' year with subjects running for a half year or more, five times per week with recitations forty minutes long and which have the subjects in the state high school course, or their equivalent, will, as far as possible, have their students admitted to the next higher class in the University.

Students therefore will, as far as the arrangement of classes at the University permits, enter the next higher class at once. In case

the next higher class does not come at once they will enter such classes as may be given.

Schools which do not have a nine months' year, five recitations a week with forty minutes to each recitation, and which have short time subjects running ten, twelve or fourteen weeks each, will be given proportional accrediting, depending upon the time given and the quality of the work done. Students from such schools will take such extra work as is laid down in the course of study of the University Academy, or as may be required at the discretion of the President of the University. The state high school course is the basis of the requirements for entrance to the University and the adoption of the state course would at once simplify the passage of students from high schools into the University, and settle almost if not quite all the questions as to accrediting. It is earnestly hoped, therefore, that all high schools will adopt the state course.

It must be borne in mind, however, that the work of the University is exacting and difficult. Schools, therefore, must make their preparation, especially in Mathematics, just as exhaustive, exacting and thorough as possible. The work on principles and problems in Algebra must be done in an exacting manner. The same is true of original problems in Geometry, which should be solved in large numbers.

If the preparation of the schools is weak, the student when he enters the University will find himself unable by the end of the first semester to do the work, and will have to take the subject over again, or be otherwise conditioned. In case students from any school for two consecutive years are poorly prepared in any subject, the school authorities will be notified, and the accrediting will be withdrawn in that subject, at the discretion of the President of the University. The accrediting will not be restored until the standard of work in the subject noted is brought up.

In this connection the notice of school authorities is called especially to the fact *that abundant experience has shown that a short school year of six, seven or eight months, and short time subjects, running for ten, twelve, fourteen or sixteen weeks, with only thirty or thirty-five minutes to a recitation, do not provide adequate preparation for any high grade university work*, and that the credit given for such work can not fairly be as great as credit for work on the basis of a year of thirty-six weeks, with recitations forty minutes long. That is to say, in a two year high school course students with the first preparation lack nearly a third of a year of having as much training as students under the second conditions.

CHANGE IN METHOD OF ACCREDITING

Beginning September, 1902, the University will change its method of accrediting for entrance to the classes of the University Academy, and of the University proper, from the credit to the subject or unit plan. A subject (like algebra, for instance,) running one year, i. e., thirty-six weeks, five times per week, with forty minutes for each recitation, will constitute a unit.

This will make the University articulate perfectly with the State Course of Study for High Schools, each of whose subjects runs for a year or a half year, i. e., constitutes a unit or a half unit. There should be four units in each year, each requiring five recitations per week and forty minutes to a recitation.

The requirements for entrance, therefore, will no longer be calculated on a set number of credits, but will be determined by the satisfactory completion for the length of time required of the subjects specified below as necessary for entrance.

The evidence of the satisfactory completion of the different subjects will be the *certificate of the superintendent or principal of schools, or clerk of the school board*, or an examination at the University, or the recommendation of the President of the University.

Students wishing to avoid examinations at the University should come from an accredited school, and bring a certificate of work done. *Therefore school boards are urged to have their high school work accredited at the University*, and to that end the proper blank will be sent by the University and should be filled out and returned promptly to the President of the University.

Beginning September, 1902, college credit will not be granted for preparatory or high school work; except that where the student has finished the entrance requirements, and in addition to them, extra work in Latin, Greek, French or German, this additional work will be counted as college work, provided it has been followed consecutively from a year or more.

INCREASE IN REQUIREMENTS

FIRST CLASS

Especial attention is called to the fact that beginning with September, 1902, the University will raise its standard for admission to the First Class of the University Academy by the addition of one year of Latin and a half year of Algebra to the required subjects.

The number of credits hitherto required for entrance to this class was 30, or an equivalent of 6 units. Necessary preparation for university work requires that the number of units be raised to 7½, or an equivalent of 37½ credits.

Beginning September, 1904, the requirements for entrance to the same class will be raised to 8 units, or an equivalent of 40 credits.

SECOND CLASS

In like manner the requirements for entrance to the second class of the Academy will be raised from 9 1-5 units, or an equivalent of 46 credits, to 11 units, or an equivalent of 55 credits.

Beginning September, 1904, the requirements will be 11½ units, or an equivalent of 57½ credits, for the same class.

FRESHMAN CLASS

In the same way, for entrance to the Freshman Class, beginning September, 1902, 14 units will be required, or an equivalent of 70 credits, and beginning September, 1904, 15 units will be required, or an equivalent of 75 credits.

REQUIREMENTS FOR ENTRANCE TO UNIVERSITY CLASSES

The following requirements for admission to the classes of the University show the subjects that ought to be included in two year, three year and four year high school courses, and also the length of time necessary in order to best fit for the University. They also follow closely the state high school course.

Especial attention is called to the fact that beginning September, 1902, one year of Latin will be required for entrance to the Freshman Class.

A UNIT means a study running one year (36 weeks) five times a week, with recitations forty minutes long.

FOR ENTRANCE TO FIRST UNIVERSITY CLASS, 1902

Which students from two year high schools enter.

Beginning with September, 1902, 7½ units will be necessary for entrance to this class.

REQUIRED SUBJECTS

English	2	units.
*Algebra (Wells' Essentials of Algebra)	1½	"
History, Greek and Roman	1	"
Physical Geography	1	"
	5½	units.

The balance of 7½ units may be made up from the following:

Latin	1	unit.
Physiology	½	"
Higher Arithmetic	½	"
Botany (according to time given)	½ or 1	"
History, Mediæval, with special reference to England	1	"

FIRST CLASS, 1904

For entrance to the First University Class, 1904, 7½ units will be necessary as follows:

REQUIRED SUBJECTS

English	2	units.
*Algebra (Wells' Essentials)	1½	"
History, Greek and Roman	1	"
Physical Geography	1	"
	5½	units.

The balance may be made up from the following:

Latin	1	unit.
Physiology	½	"
Higher Arithmetic	½	"
Botany	½	"
History, Mediæval with special reference to England	1	"

*All candidates for regular courses in the College of Science and Engineering and the General Scientific Group of the College of Literature, Science and the Arts must take one-half year of Higher Algebra (Wells' Higher Algebra or an equivalent) at the University as shown below.

FOR ENTRANCE TO THE SECOND UNIVERSITY CLASS, 1902

Which students from three year high schools enter.

For entrance to the Second Class of the University beginning September, 1902, eleven (11) units will be necessary.

REQUIRED SUBJECTS

English	3	units.
*Algebra (Wells Essentials)	1½	"
Physical Geography	1	"
History, Greek and Roman	1	"
Plane and Solid Geometry	1½	"
	8	units.

The balance may be made up from the following:

Latin	1 or 2	units.
History	1 or 2	"
Botany	½ or 1	"
Chemistry	½ unit.	
Physics	½ "	
Astronomy	½ "	
Physiology	½ "	
Zoology	½ "	
Higher Arith.	½ "	
By combining any two	1	"

SECOND CLASS, 1904

For entrance to the Second Class, 1904, 11½ units will be required as follows:

REQUIRED SUBJECTS

English	3	units.
*Algebra (Wells' Essentials)	1½	"
Physical Geography	1	"
History, Greek and Roman	1	"
Plane and Solid Geometry	1½	"
	8	units.

The balance may be made up from the same branches as in the list for 1902.

*All candidates for regular courses in the College of Science and Engineering, and the General Scientific Group of the College of Literature, Science and the Arts must take one-half year of Higher Algebra (Wells' Higher Algebra or an equivalent) in the University.

FOR ENTRANCE TO THE FRESHMAN CLASS, 1902

(THIRD UNIVERSITY CLASS, 1902)

Which students from four year high schools enter.

For entrance to the Freshman Class of the University, beginning September, 1902, fourteen (14) units will be necessary.

REQUIRED SUBJECTS

English	4	units.
*Algebra (Wells' Essentials)	1½	"
Or Algebra (including ½ year Higher Algebra)	2	"
Physical Geography	1	"
History, Greek and Roman	1	"
Latin	1	"
Geometry, plane and solid	1½	"
	10 or 10½	"

The balance may be made from the following:

Latin	1, 2 or 3	units.
History	1 or 2	"
Botany (according to time given)	½ or 1	"
Physics or Chemistry	1	"
Astronomy	½ unit.	
Physiology	½ "	
Zoology	½ "	
By combining any two	1	"

Reasonable allowance will be made for equivalents to all except required subjects.

FRESHMAN CLASS, 1904

For entrance to the Freshman year, in 1904, and thereafter fifteen units will be required as follows:

*All candidates for regular courses in the College of Science and Engineering and for the General Scientific Group of the College of Literature, Science and the Arts must take Higher Algebra (in addition to Wells' Essentials) for one-half year, either at their home school or at the University. STUDENTS FROM ALL BUT FOUR YEAR HIGH SCHOOLS MUST TAKE IT AT THE UNIVERSITY WHERE THEY CAN TAKE IT WITHOUT LOSS OF TIME.

REQUIRED SUBJECTS

English	4	units.
*Algebra (Wells' Essentials)	1½	"
Geometry, plane and solid	1½	"
History, Greek and Roman, and Mediæval with special reference to England, or American History and Constitution	2	"
Physical Geography	1	"
Botany and Physics	1	"
Latin	1	"
	12	units.

The balance of fifteen units must be made up from the following:

Latin	1 or 2	units.
German	1 or 2	"
Botany	1	"
Physics or Chemistry	1	"
History, Modern	1	"
History, American and Constitution	1	"
Zoology	½	unit.
Astronomy	½	"
Geology	½	"
Physiology	½	"
Higher Arithmetic	½	"
Elementary Political Economy	½	"
By combining any two	1	"

DETAILED LIST OF ENTRANCE SUBJECTS

ENGLISH. No candidate will be accepted in English without condition whose written work is notably defective in spelling, punctuation, grammar and structure of sentences and paragraphs.

*All candidates for regular courses in the College of Science and Engineering and for the General Scientific Group of the College of Literature, Science and the Arts must take Higher Algebra (in addition to Wells' Essentials) for one-half year, either at their home school or at the University. STUDENTS FROM ALL BUT FOUR YEAR HIGH SCHOOLS MUST TAKE IT AT THE UNIVERSITY WHERE THEY CAN TAKE IT WITHOUT LOSS OF TIME.

English Composition. After June, 1901, all candidates from schools not accredited to the University in English Composition will be required to write not less than one hundred words on each of three topics chosen by him from a considerable number, perhaps ten or fifteen; and two of the topics chosen must be from the books assigned for general reading and composition work under English Literature.

English Literature. This work includes (1) the reading of books for general reading which are also to be used as a basis for composition work; and (2) the reading of a few masterpieces for thorough study. The written statement of the teacher that the books in (1) have been read will usually be accepted; otherwise tests in addition to the work under English Composition will be required. In regard to books in (2), after June, 1901, all candidates from schools not accredited in English Literature will be required to write not less than two hundred words on some one topic, and a paragraph or two on a second topic, chosen by him from a list selected from Books for thorough Study. These books are to be critically read and studied in class, with reference to the following points: (a) The language, including the meaning of words and sentences, the important qualities of style, and the important allusions; (b) The plan of the work, i. e., its structure and method; (c) The place of the work in literary history, the circumstances of its production, and the life of its author, and that all details be studied, not as ends in themselves, but as means to a comprehension of the whole.

Exercise books, properly certified by the instructor, sent direct to the University by schools accredited in English Literature, will be accepted in lieu of the examination.

NINTH GRADE

I. Books for General Reading and Composition Work:

Dickens: Christmas Carol.
Lowell: Vision of Sir Launfal.
Goldsmith: Vicar of Wakefield.
Hawthorne: The House of the Seven Gables.
Whittier: Snowbound and other poems.

II. Books for Thorough Study:

Shakespeare: Merchant of Venice.
Franklin: Autobiography.

TENTH GRADE

I. Books for General Reading and Composition Work:

Longfellow: Tales of the Wayside Inn.
Addison: Sir Roger de Coverly.
Shakespeare: Julius Cæsar.
Holmes: Selected Poems.

II. Books for Thorough Study:

Burke: Conciliation of America.
Lincoln: Gettysburg, Second Inaugural and Other Speeches.
Macaulay: Essay on Addison.

ELEVENTH GRADE

I. Books for General Reading and Composition Work:

Tennyson: Enoch Arden and Other Poems.
Emerson: Two Selected Essays.
Carlyle: Essay on Burns.
Burns: Cotter's Saturday Night and Other Poems.
Hanson: Essay on Burns and Selected Poems from Burns.
De Quincey: Revolt of the Tartars.

II. Books for Thorough Study:

Webster: Reply to Hayne.
Shakespeare: As You Like It.
Macaulay: Essay on Milton.
Milton: L' Allegro, Il Peneroso, Comus and Lycidas.

TWELFTH GRADE

I. Books for General Reading and Composition Work:

Cooper: Last of the Mohicans.
Eliot: Silas Marner.
Tennyson: The Princess.
Coleridge: Ancient Mariner.
Scott: Ivanhoe.

II. Books for Thorough Study:

Shakespeare: Macbeth.
Emerson: The American Scholar.
Milton: Paradise Lost, I and II.
Western Authors: Five Selected Poems.

ALGEBRA.—The requirements in Algebra embrace the following subjects: Factors, common divisors and multiples, fractions, involution, including the binomial theorem for positive integral exponents; evolution, theory of exponents, radicals and equations involving radicals, ratio and proportion, elementary logarithms; the ordinary methods of elimination, and the solution of numerical and literal equations of the first and second degrees, with one or more unknown numbers, and of problems leading to such equations.

Work based on any one of the following text-books will be accepted, the work to have five full recitation periods per week for a year and a half; a school year to be at least thirty-six weeks, and a recitation to be at least forty minutes in length:

Lilley's Elements of Algebra completed, including all of the examples and problems; Wentworth's Complete Algebra, completed, except chapters 22 to 34 inclusive; Wells' New Higher Algebra, completed, except chapters 36 to 40 inclusive; and Wells' Essentials of Algebra, the state text-book.

PLANE AND SOLID GEOMETRY.—A course based on any one of the following text-books will be accepted; the work to cover five recitations per week for one and a half years.

Wentworth's Plane and Solid Geometry, edition for 1899, completed, including two-thirds of the exercises; Phillips and Fisher's Abridged Geometry, completed, including all problems; Wells' Essentials of Plane and Solid Geometry, completed, including all exercises.

The student should be required to state definitions clearly, whether in the language of the text-books or not, and in solving a problem or proving a proposition he should be able to prove every statement made. All figures should be constructed by the student with strict accuracy, on correct geometrical principles, using rule and compass; and this should be persisted in until it can be done with ease. Pains should be taken that original demonstrations be given in good form. Besides oral recitations the student should be required carefully to write out his own demonstrations, and to apply geometrical principals to the solution of practical and numerical examples. He should be required to demonstrate propositions and solve problems without the aid of the text-book.

HISTORY—Four recitations a week for one year. Either of the following:

1. Greek and Roman, with connected geography. (a) Greek History to death of Alexander; (b) Roman History to A. D. 800. Botsford's Greek History and Botsford's Roman History are the state texts.

Students preparing for the University in History are strongly urged to take Greek and Roman History.

2. Mediaeval and Modern History—The following indicate the preparation required: Myers' Mediaeval and Modern History, Fisher's Growth of Nations, Adams' European History.

3. English History—Ground covered by History of England by Coman and Kendall.

4. American History and Constitution—Montgomery's Students' History of the United States, Channing's Students' History of the United States, or some book of like nature, provided a more elementary History has been previously studied. Otherwise some briefer standard high school History. Strong & Schafer's Government of the American People.

In all cases the text-book should never be depended upon entirely; supplementary work should be done with one or two other text-books, and at least one large General History for reference. See the Report of Committee of Seven on the Study of History in Schools.

SCIENCE—Four recitations per week for a year. Either of the following:

1. Botany and Physical Geography.
2. Chemistry.
3. Physics.

Science work, to be accepted for entrance to the University, must be from a standard high school text-book; thorough laboratory practice is absolutely necessary when the subject allows. Laboratory manuals and note books must be in constant use, and students coming from schools not accredited to the University must present their laboratory note-books, signed by the teacher. In Chemistry, some text equivalent to Remsen's Briefer Course must be used; in Physics, a text equivalent to Carhart and Chute; in Botany to Bergen's Elements; and in Physical Geography any standard text.

Schools are recommended to select Botany as the Science in which they will prepare students, on account of the smaller expense in fitting a working laboratory.

LATIN—Five recitations per week for the first year, and four per week for the three succeeding years.

First Year—Latin lessons and grammar, and Viri Romae, or Nepos, or Caesar's Gallic War Begun.

Second Year—Caesar, four books.

Third Year—Cicero, six or seven orations, including the four against Cataline, and Sallust's Jugurtha.

Fourth Year—Vergil, six books of the Aeneid.

GREEK—Five recitations per week for the first year, and four recitations per week for the two succeeding years.

First Year—Greek lessons and Zenophon's Anabasis begun.

Second Year—Zenophon, four books of the Anabasis.

Third Year—Homer, first three books.

FRENCH—Five recitations per week for one year. Written exercises and grammar work; systematic work in French pronunciation, and as much practice in reading as possible to give facility in reading easy French prose.

GERMAN—Five recitations per week for one year. Written exercises and grammar work and systematic training in German pronunciation. As much drill as possible in rapid reading of German prose and poetry.

ELECTIVES—The electives that may be offered and the time to be given to each are found elsewhere.

CHEMISTRY

Students who offer chemistry for entrance will have fulfilled all of the entrance requirements in chemistry *after satisfactorily taking advanced chemistry* at the University during the second semester of the Freshman year of the General Scientific or Civic Historical Group, or during the second semester of the Sophomore year of the General Classical or General Literary Group, or during the second semester of the Freshman year of the groups in the School of Applied Science, or during the first year in which chemistry is taken in the course Preparatory to Medicine and Dentistry; or during the Freshman year of the courses in Engineering. Provided, any student shall have the option of taking, at the time of entrance, an examination

in the subject; provided also, students from schools doing four years of High School work (with adequate laboratory facilities in chemistry) as set down in the State High School Course, or its equivalent, may, at the discretion of the head of the department, be exempt from this provision.

Students who take the second semester in chemistry in the years given above will have fulfilled not only the requirements for entrance, but also the requirements for the college work in chemistry in the years mentioned above. Students who do not offer chemistry will take the full year's work as laid down in the group of their choice.

Students entering the course Preparatory to Medicine and Dentistry must either offer both chemistry and physics for entrance according to the above arrangement or take one or both during the course.

PHYSICS

1. All students who offer for entrance a half year or more of physics, as laid down in the State High School Course, will receive credit therefor, provided they elect physics in the Freshman or Sophomore year.

2. All candidates for the A. B. degree, except those of the General Scientific Group, who offer physics for entrance, will, subject to the discretion of the head of the department, take the first semester in the Freshman or Sophomore year according as it is laid down in their chosen group.

3. All candidates for the A. B. degree in the General Scientific Group, and all candidates for the B. S. degree, who offer physics for entrance, will, subject to the discretion of the head of the department, take a full year in physics as laid down in their chosen group.

4. All students, for whatever degree they may be candidates, who do not offer physics for entrance as above, and of whom it is required as college work, will take a full year of physics as laid down in their chosen group.

5. Provided, in all cases, students may take an examination on the work covered by the half year or year of University physics and for satisfactory work in examination be excused from and accredited with the subject.

6. Schools with laboratory facilities, doing four years of high school work as laid down in the State High School Course, or its

equivalent, may, at the discretion of the head of the department, be exempt from this requirement of extra work.

7. Students entering the Course Preparatory to Medicine and Dentistry must either offer both chemistry and physics for entrance according to the above arrangement or take one or both during their course.

ENGLISH

In English the University reserves the right to examine *all* candidates in spelling, punctuation, grammar and structure of sentences and paragraphs.

LATIN

All students entering in 1902-1903 must have one year of Latin before beginning the Freshman year.

All students in the General Scientific, Civic Historical and Philosophical-Educational groups must take one year more of Latin in Freshman year, and then (1) may take either Latin or French or German for the balance of the course (three years); or (2) may, after taking Latin in Sophomore year, making three years of Latin in all, take either French or German, which must be taken two years.

In General Classical and General Literary groups the arrangement remains as before.

In all groups in the School of Applied Science, except group 6, students entering must have in 1902-1903 one year of Latin before beginning the Freshman year. They must then take one year more of Latin in the Freshman year; and then may (1) either continue their Latin to the end of the Junior year, or (2) may elect either French or German, which must be taken two years, i. e. both in Sophomore and Junior years.

All students entering in 1904 must have two years of Latin before beginning the Freshman year.

In the General Scientific, Civic Historical and Philosophical-Educational groups students entering the Freshman year in 1904 and after have the choice (1) of continuing Latin for three years, making five years of Latin in all; or (2) of electing either French or German for three years; or (3) of taking two years of either French or German, and then two years of the other by electing it in the Senior

year. In case option 3 is taken students *must* elect either French or German in Senior year to carry out above arrangement.

In the regular groups in the School of Applied Science the same options as above will be open to students.

In 1904 Latin will not be required in the Senior year of the General Classical and General Literary groups; and neither Latin, French nor German will be required in the Senior year of the General Scientific, Civic Historical and Philosophical-Educational groups, except as French or German may be a necessary elective under the options given above.

PROBATIONARY STATUS OF STUDENTS

All students admitted on certificates are on a probationary status only for the first half year of residence, and the credits or units allowed them are not placed permanently upon their record until such time as they have shown themselves able to do the work of the University.

TWO AND THREE YEAR HIGH SCHOOLS

Most of the high schools of Oregon are as yet two year, or at the most, three year high schools. Therefore, their work has to be supplemented by preparatory courses at the University, because the work of Freshman year is based upon four years of preparatory work.

Students from two year high schools whose work is satisfactory and which are full two year high schools (i. e., have a year of thirty-six weeks, recitations five times a week and forty minutes long) will therefore enter the First Class of the University. Those from full three year high schools will enter the Second Class of the University.

Students from schools that are not full three year or two year schools will take such review work as is laid down in the course of study below for the First and Second Classes of the University, or be conditioned otherwise at the discretion of the President of the University.

The course of study adopted in the University Academy (see catalogue under University Academy) shows just how students coming from the high schools will enter the various classes of the University.

SPECIAL STUDENTS*

Special students not candidates for a degree may be admitted to the University to pursue one or more subjects for which they may be fitted, who fulfill all the requirements for entrance to the Freshman year, if the subject or subjects that they desire are college subjects. If the subject or subjects desired are preparatory subjects, then such students shall fulfill all requirements for entrance to the First Class of the University Academy, which corresponds to the eleventh grade of the high school course; provided, that persons of maturity, twenty years of age or over, and teachers in public or private schools, may, at the discretion of the Committee on Special Students, enter as special students without conforming to the above requirements. These requirements shall not apply to special collegiate or other courses where requirements for entrance are specified.

The Committee reserve the right to discuss the programme proposed by the student and to require such changes as may in their judgment seem wise. Students other than those of mature years are always required to furnish the Committee with evidence that the course proposed subserves a definite object which they have in view.

No student can be accepted without condition whose written English work is seriously defective in point of penmanship, spelling, punctuation, grammar, sentence structure and paragraphing.

THE COLLEGE GROUPS

In the college of Literature, Science and the Arts, the University offers seven general groups; and in the College of Science and Engineering, seven general groups and three technical groups; and in the School of Mines and Mining, one general group with two subdivisions.

REQUIREMENTS FOR GRADUATION

Graduation is no longer determined by a calculation of a set number of credits. Graduation will follow the satisfactory completion of some one of the groups laid down, including the required subjects with the number of hours noted, and the elective work, subject to the approval of the Deans of the proper departments and of the Instructors of the various courses elected. The number of hours of elective work must conform to the requirements of the group chosen.

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*These courses do not lead to a degree.

After the ending of the University year 1901-02, graduation under the 100 credit system will no longer be granted.

Applications from resident students for Senior standing must be delivered in writing to the Chairman of the Senior Credits Committee on or before the 30th of June preceding the opening of each University year.

HOURS (OR CREDITS)

The number of hours as set down in the groups and courses of the various colleges and schools refers to the number of hours of recitation or lecture per week for one year. Therefore, for example, when four hours of English work are called for the work is to continue for one year.

A course running four times per week for one semester would thus be the equivalent of two hours only. It would take two such semester courses to satisfy requirements of four hours of work.

EXTRA HOURS

Mature students of excellent preparation and health, whose work is of a character to justify it, may, with the consent of the Committee on Credentials, take more than the required number of hours and thus shorten the time for graduation, *subject to the following conditions:*

Students who shall be permitted to carry more than the required number of hours shall receive credit for the same at the end of the semester or year, provided the extra credits for the semester or year shall be all of grade B, and provided no more than six credits of the required work for the same year shall fall below grade B and none below grade C. Grades claimed under this proviso will not be granted during any other year than the one in which these extra studies were taken; and students wishing to avail themselves of this proviso must designate their extra hours, as such, at the time of filing their schedule cards—provided also that gymnasium credits shall not be counted.

Each student shall have to conform to all the requirements in regard to attendance, but shall be allowed to drop such extra studies at any time on notice to the instructor and the Dean of his department.

This rating of B for extra credit subjects is made on the basis of a strict adherence to the schedule of marks in force for the Univer-

sity, i. e., that A equals 95 to 100 per cent; B equals 90 to 95 per cent; C equals 80 to 90 per cent; D equals 70 to 80 per cent; E equals below 70 per cent. The passing mark is 70 per cent., and below 70 per cent. is failure.

I

THE COLLEGE OF LITERATURE, SCIENCE AND THE ARTS

(Leading to the degree of Bachelor of Arts.)

1. The General Classical Group.
2. The General Literary Group.
3. The General Scientific Group.
4. The Civic Historical Group.
5. The Philosophical-Educational Group.
6. Collegiate Course for Teachers.
7. Collegiate Course Preparatory to Law and Journalism.

All of the foregoing groups except 6 and 7 lead to the degree of Bachelor of Arts. The main difference between them is that the first two require two languages besides English, and the others but one, and devote the extra time to a more extended study of scientific subjects or topics in political science or history, or philosophy and education.

1. General Classical Group.

Freshman Year—	NO. OF HOURS
Latin (or Elective*)	5
Greek (or Elective*)	5
Plane Trigonometry, 1st semester three times per week History, 1st sem. twice a week, 2nd sem. four times	4
English	4
	18†

* Students entering with four years of Latin will substitute elective work in the place of the Latin in the above list. Those entering with three or two or one year of Latin will substitute a corresponding number of elective years instead of the Latin laid down for these years.

Students entering with one, two or three years of Greek will substitute in like manner.

† Students entering with one year or more of Latin or Greek will have but seventeen hours in Freshman year.

	NO. OF HOURS
Sophomore Year—	
Latin (or Elective*)	4
Greek (or Elective*)	4
English	5
Chemistry or Physics	5
	18
Junior Year†—	
Latin (or Elective§)	4
Greek (orElective§)	4
Economics	3
Elective	6
	17
Senior Year—	
Latin (or Elective)	4
Elective	13
	17

2. General Literary Group.

Freshman Year—	
Latin (or Elective§)	5
French or German (or Elective)	5
Plane Trigonometry, 1st sem., three times a week History, 1st sem. twice a week; 2d sem, four times,	4
English	4
	18‡
Sophomore Year—	
Latin (or Elective§)	4
French or German (or Elective§)	4
English	5
Chemistry or Physics	5
	18

* Students entering with four years of Latin will substitute elective work in the place of the Latin in the above list. Those entering with three or two or one year of Latin will substitute a corresponding number of elective years instead of the Latin laid down for these years.

§ Students entering with Latin, French or German will substitute elective work for the years already taken (see note under General Classical Group). Students taking French or German as college subjects may take two years of each or four years of one.

† The major elective must be chosen at the beginning of the Junior year, and must consist of at least one-half of the elective credits in the Junior and Senior years in the chosen department.

‡ Students entering with a year or more of Latin or French or German will have but seventeen hours during Freshman year.

Junior Year‡—	NO. OF HOURS.
Latin (or Elective*)	4
French or German (or Elective*)	4
Economics	3
Elective	6
	17

Senior Year—	
Latin (or Elective*)	4
Elective	13
	17

3. General Scientific Group.

Freshman Year—	NO. OF HOURS.
Latin or French or German (or Elective*)	5
Chemistry or Physics	5
Plane Trigonometry	5
English	4
	19†

Sophomore Year—	
Latin or French or German (or Elective*)	4
English	5
Chemistry or Physics	5
Economics	3
	17

Junior Year‡—	
Latin or French or German (or Elective*)	4
Elective	13
	17

Senior Year—	
Latin or French or German (or Elective*)	4
Elective	13
	17

* Students entering with Latin, French or German will substitute elective work for the years already taken (see note under General Classical Group). Students taking French or German as college subjects may take two years of each or four years of one.

† Students entering with one year or more of Latin, French or German will have but eighteen hours in Freshman year.

‡ Each student must at the beginning of the Junior year choose a major subject, which must consist of at least one-half of the number of elective credits in Junior and Senior years in the same department.

4. Civic Historical Group.

Freshman Year—	NO. OF HOURS
Latin, French or German (or Elective*)	5
Plane Trigonometry, 1st semester three times a week History, 1st sem. twice a week, 2nd sem. four times	4
English	4
Chemistry or Physics	5
	18†
Sophomore Year—	
Latin or French or German (or Elective*)	4
English	5
Economics	3
History	5
	17
Junior Year‡—	
Latin or French or German (or Elective*)	4
Elective	13
	17
Senior Year—	
Latin or French or German (or Elective*)	4
Elective	13
	17

5. Philosophical-Educational Group.

Freshman Year—	
Latin, French or German (or Elective*)	5
English	4
Plane Trigonometry, 1st semester three times a week History, 1st sem. twice a week, 2nd sem. four times	4
Chemistry or Physics	5
	18†

* Students entering with Latin, French or German will substitute elective work for the years already taken (see note under General Classical Group). Students taking French or German as college subjects may take two years of each or four years of one.

† Students entering with a year or more of Latin, French or German will have but seventeen hours in Freshman year.

‡ Each student must, at the beginning of the Junior year, choose a major subject, which must consist of at least one-half of the number of elective credits in Junior and Senior years in same department.

Sophomore Year—	NO. OF HOURS
Latin or French or German (or Elective*)	4
English	5
Economics	3
Education, first semester Ethics, second semester	5
	17

Junior Year‡—	
Latin or French or German (or Elective*)	4
Philosophy or Psychology	3
Elective	10
	17

Senior Year—	
Latin or French or German (or Elective*)	4
Psychology	2
Elective	11
	17

6. Collegiate Course for Teachers.

Not leading to a degree.

The University offers a collegiate course for teachers not leading to a degree, under the College of Literature, Science and the Arts. Students are strongly urged to take one of the regular courses leading to a degree, because of the constantly increasing demands upon professional men and women, which are almost certain to severely handicap those whose training has fallen short of a thorough four years' University course. Nevertheless, for students to whom, for various reasons, a full college course is an impossibility, these courses are offered.

The course provides no training in methods, but is designed for teachers, principals and superintendents already in the service, and others who contemplate teaching, but have not the time at their

* Students entering with Latin or French or German will substitute elective work for the years already taken (see note under General Classical Group). Students taking French or German as college subjects may take two years of each or four years of one.

‡ Each student must, at the beginning of the Junior year, choose a major subject, which must consist of at least one-half of the number of elective credits in Junior and Senior years in the same department.

disposal for a course leading to a degree. It offers an opportunity to a large body of qualified teachers who wish to increase their efficiency by a study of educational problems in which they are especially interested.

REQUIREMENTS FOR ADMISSION

It is open to graduates of normal schools and to all other teachers of experience who can satisfy the President of the University and the head of the department of education that they are qualified to do the work.

COURSE OF STUDY

The course covers two years of at least seventeen hours per week each. The work will be arranged upon consultation with the head of the department of education to suit the needs of the individual teacher, providing the following regulations are observed:

1. Thirteen hours must be elected in the subjects or closely allied subjects that the students expect to teach.

2. Seven hours must be elected in psychology and education.

3. The choice of all work in the course must be made subject to the advice and control of the head of the department of Education.

7. Collegiate Course Preparatory to Law or Journalism.

Not leading to a degree.

This course presumes considerable maturity of mind and special preparation. Applicants for admission to the course must meet the requirements for admission to the Sophomore year of some one of the groups of the College of Literature, Science and the Arts. In exceptional cases students of especial maturity and of strong powers of application may, at the discretion of the Committee on Special Students be admitted to this course.

COURSE OF STUDY

The course of study includes two years of seventeen hours per week each. The work must be divided as follows:

1. American history and constitutional law, 10 hours.

2. English, 5 hours.

3. Economics, and sociology or political science, 8 hours.

4. English history, 3 hours.
5. Journalism, 4 hours.
6. Elective*, 4 hours.

THE SCHOOL OF COMMERCE

FACULTY

The Faculty of each College consists of the President of the University and the professors and instructors giving instruction in the College.

ORGANIZATION

The University offers the foundation of a School of Commerce, giving special educational facilities to those who expect to enter commercial life. It is intended to fit young men more thoroughly and definitely for the successful management of large manufacturing and commercial enterprises.

The University courses already offered are so framed that they supply to a considerable degree the necessary training. For this reason no additional classes or instructors will be necessary for two or three years. The training will include the following subjects, many of which are now given at the University: German, French, Spanish, history of commerce, finance, exchange, banking and general economics; theory and methods of transportation; climate, resources and general geography of foreign countries, laws of insurance; elementary engineering, in order to give an accurate general knowledge of the generation and transmission of power; materials of manufacturing; home and foreign methods of business and transportation; history of colonies and colonial administration; political science, with fundamentals of jurisprudence and common law; commercial geography, customs requirements, etc., etc.

REQUIREMENTS FOR ENTRANCE

The requirements for entrance to the School of Commerce will be

* Students with excellent preparation and good health may take a greater number of hours, and thus increase the number of elective hours. (See rules governing extra hours.)

the same as those to any group of the College of Literature, Science and the Arts, or of the College of Science and Engineering. Special students may take subjects in this school under the same restrictions as in other courses.

COURSE OF STUDY

The course of study will include four years, of seventeen hours per week per year. By a suitable choice of electives two lines of study may be had: Group 1, with especial reference to history, political science, and economics, history of commerce and the problems that large commercial organizations give rise to; Group 2, with special reference to engineering or other topics that deal with the problems of transportation and the materials with which commerce deals in trade with different nations.

The number of credits required for graduation will be sixty-eight, in addition to the entrance credits required, distributed as follows:

1. Required subjects.
2. Elective subjects.
   (a) Group 1.
   (b) Group 2.

The classification of electives will be made at as early a date as possible.

II.

THE COLLEGE OF SCIENCE AND ENGINEERING

A. THE SCHOOL OF APPLIED SCIENCE.

Leading to the degree of Bachelor of Science.

1. General Elective Group, including psychology, astronomy, and electives in general science.
2. Chemistry.
3. Physics.
4. Geology and Mineralogy.
5. Four Year Course Preparatory to Medicine.
6. Special Course Preparatory to Medicine.†

† This course does not lead to a degree.

REQUIREMENTS FOR ADMISSION

The requirements for admission to these courses are the same as for admission to the Groups of the College of Literature, Science and the Arts, with exceptions noted below.

COURSE OF STUDY

Groups A, 2 and 3.

	NO. OF HOURS
Freshman Year—	
Latin or French or German (or Elective*)	5
Chemistry or Physics	5
English	1
Mathematics	5
	16
Sophomore Year—	
Latin or French or German (or Elective*)	4
English	4
Chemistry or Physics	5
Mathematics	5
	18
Junior Year—	
Latin or French or German (or Elective*)	4
English	4
Elective	10
	18
Senior Year—	
Economics	3
Elective	14
	17

Groups A, 1 and 4.

Same as Groups A, 2 and 3, except that in the Sophomore year instead of Mathematics five hours elective work will be taken.

* Students entering with Latin, French or German will substitute elective work for the years already taken (see note under General Classical Group). Students taking Latin, French or German as college subjects may take two years each of any two or four years of any one.

Group A, 5.

Four Year Course Preparatory to Medicine and Dentistry.

This is a regular course leading to the degree of Bachelor of Science. It includes all the required work of the Groups of the College of Literature, Science and the Arts, except one year of Language.

REQUIREMENTS FOR ADMISSION

The requirements for admission to this course are the same as those for admission to any of the Groups of the College of Literature, Science and the Arts.

COURSE OF STUDY

	NO. OF HOURS
Freshman Year—	
Latin or French or German (or Elective*)	5
Chemistry or Physics	5
English	1
Mathematics	5
	16
Sophomore Year—	
Latin or French or German (or Elective*)	4
English	4
Physics or Chemistry	5
Biology	3
Cryptogamic Botany, 1st semester Phænogamic Botany, 2nd semester	3
	19
Junior Year—	
Latin or French or German (or Elective*)	4
English	4
Chemistry, Analytical	5
Histology	3
Medical Botany, 2nd semester	2
Mammalian Anatomy, 1st semester	1
	19

* Students entering with Latin, French or German will substitute elective work for the years already taken (see note under General Classical Group). Students taking French or German as college subjects may take two years of each or four years of one.

Senior Year—	NO. OF HOURS
Physiology	2
Osteology	4
Economics	3
Chemistry	5
Bacteriology	3
Embryology	2
	19

Group A, 6.

Special Course Preparatory to Medicine and Dentistry.

The University offers a Course Preparatory to Medicine and Dentistry, not leading to a degree, which anticipates one year of the Medical School of the University of Oregon; the College of Physicians and Surgeons, San Francisco; Rush Medical College, Chicago; College of Medicine and Surgery of the University of Minnesota; College of Physicians and Surgeons of the University of Illinois, at Chicago; Medical School of Yale University; Cooper Medical College, San Francisco; Marion Sims College of Medicine, St. Louis. Graduates from this course also receive concessions from the Medical School of the University of Pennsylvania and the Medical Department of Johns Hopkins University.

The Course Preparatory to Medicine and Dentistry also prepares students for dentistry as the first year's work of dental schools is almost identical with that of medical schools.

This course is offered for those who for any reason find it impossible to complete a full college course before entering a medical or dental school. Students are strongly urged, however, to complete their college course first, for the reason that the intense competition of the present day makes necessary the most thorough preparatory training that can be had; and because the number of medical schools requiring a college diploma for entrance is very large and is rapidly increasing. During the college course students may take as electives the subjects laid down in the Course Preparatory to Medicine and Dentistry, and thus anticipate one year of the medical and dental school.

ADMISSION

The requirements for admission to this course are the same as the

requirements for admission to the Freshman class of the A. B. Groups of the College of Literature, Science and the Arts, except that four hours of Latin (or less if a special course is arranged) will be required for 1902-03 in addition to requirements noted.

COURSE OF STUDY

First Year—	NO. OF HOURS.
English	4
Latin	4
*Chemistry or Physics	5
Biology	3
	16

Second Year—	
Chemistry or Physics	5
Osteology	4
Histology	3
Physiology	2
Botany or Elective { Cryptogamic, first semester / Phanerogamic, second semester }	3
Mammalian anatomy, first semester	1
Embryology, or elective, second semester	2
	20

Cryptogamic botany is well taken in the first semester of first year. Mammalian anatomy must precede or accompany histology, and must be preceded by biology. This course is intended primarily for special students desiring to anticipate the first year of medical schools. It may be taken, however, by regular students in course. Under favorable conditions some of the second year work may well be taken in the first year.

B. THE SCHOOL OF ENGINEERING

1. Civil and Municipal Engineering.
2. Electrical Engineering.
3. Chemical Engineering.

* Half of the work in Chemistry may be anticipated on the basis of entrance requirements.

ADMISSION

The requirements for admission to the Schools of Engineering are the same as the requirements for entrance to the courses of the College of Literature, Science and the Arts, except that candidates for Engineering Courses must take one-half year extra of Higher Algebra, as noted elsewhere.

1. CIVIL AND MUNICIPAL ENGINEERING.†

Leading to the Degree of Bachelor of Science in Civil Engineering.

Freshman Year—	NO. OF HOURS
Mathematics, Trigonometry and Analytical Geometry	5
English Composition and English Literature	4
General Chemistry	5
Mechanical Drawing	3
Shop Work	2
Sophomore Year—	
Mathematics, Differential and Integral Calculus	5
Advanced Physics	4
Graphic Statics	2
Descriptive Geometry	2½
Elementary Surveying	3
Shop Work	2
Junior Year—First Semester.	
Mathematics, Differential Equations	5
Topographical Surveying	3
General Geology	3
Analytical Mechanics	3
Roads and Pavements	2
Railroad Engineering	4
Junior Year—Second Semester.	
Strength of Materials	5
Elementary Geodesy	3
Analysis of Bridge Stresses	5
Analytical Mechanics	3
Railroad Engineering	4

† Municipal Engineering will not for the present be given as a separately organized course—the work is partially included in Civil Engineering.

Senior Year—First Semester.	NO. OF HOURS.
Structural Details	2
Bridge Design	5
Economic Geology and Mineralogy	3
Masonry	3
Hydraulics	4
Economics	3
Senior Year—Second Semester.	
Economics	3
Steam Engine and Boiler	3
Masonry	3
Elements of Sanitary Engineering	5
Irrigation Engineering	5
Thesis	1

On completion of the four years' work the student receives the degree of Bachelor of Science in Engineering.

POST-SENIOR YEAR

Leading to the degree of Civil Engineer.

The work of the Post-Senior year leads to the professional degree of Civil Engineer. In this year the student is allowed considerable latitude in the selection of his main line of work; thus, he may take up the more advanced courses in Bridge Engineering and Design; Railroad Engineering, including city railways; Hydraulic and Sanitary Engineering, including Biology of water supplies and Chemical Analysis of Water. It will frequently be possible to take work along two or more of these lines. A description of the courses offered will be found under the appropriate heads. A minimum of 18 hours per week must be taken, and the candidate must present a satisfactory thesis involving either the results of original study and research or complete designs and estimates of some important project.

2. ELECTRICAL ENGINEERING*

Leading to the degree Bachelor of Science in Electrical Engineering.

Freshman Year—	NO. OF HOURS.
Mathematics, Trigonometry and Analytical Geometry	5
English Composition and Literature	4

* This course is subject to revision.

	NO. OF HOURS.
Physics	5
Mechanical Drawing	3
Shop Work	2
Sophomore Year—	
Mathematics, Differential and Integral Calculus	5
Chemistry	5
Graphic Statics	2
Descriptive Geometry	2½
Electrical Testing and Measurements	2
Shop Work	2
Junior Year—	
Mathematics, Differential Equations, first semester	5
Physics	5
Direct-Current Machinery	3
Electrical Testing and Measurements	2
Analytical Mechanics	3
Geology	3
Senior Year—	
Thermo-Dynamics of the Steam Engine	5
Electricity and Magnetism	4
Alternating Current Machinery	4
Station Management	2
Economics	3
Thesis	2
	20

POST-SENIOR YEAR

Leading to the Degree Electrical Engineer.

The work will be largely elective subject to the control of the head of the department. It will consist of special advanced work to the amount of eighteen hours per week. A thesis will be required showing evidence of more than usual originality and power in this line of work.

3. CHEMICAL ENGINEERING

This course will be organized as soon as possible, according to circumstances. It is designed to give advanced instruction in chemistry, where chemistry touches manufacturing in industries certain to become important in the industrial development of the state. The instruction in industrial and applied chemistry has been arranged

with this in view, and while the general chemical principles upon which the operations rest will be taught, attention will also be given to the mechanical operations in various manufacturing processes.

COURSE OF STUDY

It is intended to supply the skilled labor necessary for industries likely to be especially adapted to the resources of the state, and to supply expert engineers capable of dealing with the problems arising in dye works, bleacheries, tanneries, sugar refineries, paper and pulp mills, the manufacture of fertilizers, soap, heavy chemicals, dye stuffs, alcohol, pharmaceutical preparations, natural and artificial oils, in the distillation of wood, coal, coal tar, and in the manufacture of explosives, glass, porcelain, pottery, etc., etc.

Freshman Year—
Like same year of course in Civil and Municipal Engineering.

Sophomore Year—
Like same year of course in Civil and Municipal Engineering.

Junior Year—
Chemistry—Quantitative Analysis, 8 hours first semester.
Chemistry—Organic, 8 hours, second semester.
Mechanics, Analytical, with Special Reference to Practical Engineering and Thermo-Dynamics, 4.
Economic Geology, 3 hours, first semester.
Resistance of Materials and Machine Design, 3 hours, first semester.
Machine Tools, Gearing, etc., 3 hours, second semester.
Electrical Engineering, Elements, 3.
Elective, 3 hours, second semester.

Senior Year—
Chemistry, Organic, 4.
Chemistry, Industrial, 4.
Engineering of Power Plant, 4 hours, first semester.
Steam Engine and Boiler, Strength of Materials, 4 hours, second semester.
Metallurgy, General, 3.
Hydraulics, or Economics or History, 3.
Chemistry, Manufacturing, 3.
Chemistry, Industrial, or Metallurgy, 3 hours, first semester.
Thesis, 3 hours, second semester.

POST-SENIOR YEAR

As soon as there is a demand for it an advanced year will be introduced leading to the degree, Chemical Engineer.

III.

THE SCHOOL OF MINES AND MINING

The School of Mines, which has been established some six years, has prospered to an extent that makes necessary an enlargement of its work and equipment. The importance to the state of mining and allied industries makes it of great moment that the best instruction possible be available in these branches within the state.

Arrangements will be made for observation and field work in the mining districts, and, for students who desire to do so, to work in the mines during the summer. The Blue River and Bohemia mining districts are close at hand, and the great mining districts of Eastern and Southern Oregon are easily accessible.

The main attention for the present will be given necessarily to gold and silver mining and metallurgy, although attention will also be given to the metallurgy of iron, steel, and especially copper. The mining of coal will be studied in connection with the Washington mines. As the number of instructors in the University increases, options will be introduced so that students may specialize in a chosen department of mining.

The demands upon the mining and metallurgical engineer are varied, and it is the policy of the University to give the student the underlying principles of mathematics, physics, chemistry, mineralogy, geology, mining engineering and metallurgy, together with some practical knowledge of civil and electrical engineering and necessary mechanical work. The courses will deal with the problems that actually arise in mining, in the treatment of ores, and in smelting. (See under Chemistry for equipment in mining.)

Students taking this course must take first year chemistry as a preparatory, i. e., high school subject, unless accepted by the head of the department by examination or otherwise, or unless first year chemistry can be taken in Freshman year of this course according to note* just after the following course of study.

COURSE OF STUDY

Leading to the degree of Bachelor of Science in Mining Engineering.

Freshman Year—	NO. OF HOURS
Mathematics, Trigonometry and Analytical Geometry	5
English Composition and Literature	4

	NO. OF HOURS
Physics*	5
Drawing	3
Shop Work	2
Sophomore Year—	
Mathematics, Differential and Integral Calculus	5
Chemistry, second year	5
Elementary Surveying	3
Descriptive Geometry	1½
Graphic Statics	2
Shop Work	2

Junior Year—First Semester.	NO. OF HOURS.
Analytical Mechanics	4
Advanced Surveying	3
Mineralogy	3
General Geology	3
Economics	3
Mining Engineering	3
Junior Year—Second Semester.	
Analytical Mechanics	4
Mineralogy	3
General Geology	3
General Metallurgy	4
Economics	3
Mining Engineering	3
Senior Year—First Semester.	
Economic Geology	3
Systematic Mineralogy	4
Metallurgy, Gold and Silver	4
Hydraulics	4
Steam Engineering	3
Senior Year—Second Semester.	
Economic Geology	3
Petrology	4
Metallurgy, Copper and Iron	4
Strength of Materials	4
Thesis	2

* Students whose preparatory physics is accepted by the head of that department may take first year chemistry in place of physics in Freshman year of this course.

POST-SENIOR YEAR

Leading to the Degree Mining Engineer.

First Semester.

Development of Mines	8
Ore Dressing	4
Roads and Bridges	2
Electro-Metallurgy	4

Second Semester.

Development of Mines	8
Coal Mining	4
Roads and Bridges	2
Electro-Metallurgy	4

UNIVERSITY ACADEMY, OR PREPARATORY SCHOOL

The University has two years' work preparatory to the Freshman class, which work corresponds in the main to the eleventh and twelfth grades of the high school work as given in this state. The high school work, however, has heretofore been so lacking in uniformity as to the year in which particular subjects were taken that it has been impossible to conform the preparatory work of the University very closely to the high school work of the state until the present year.

STATE HIGH SCHOOL COURSE

The general adoption of the new State High School Course would create uniformity which is badly needed. It is expected that this practical uniformity will result in a few years. The course of study of the University Academy, therefore, will conform to that of the State High School Course with such changes, for a few years, as circumstances make necessary.

STATE HIGH SCHOOL COURSE

First Year.

Higher English (with English Classics of this grade).
Beginning Algebra (High School grade).
Physical Geography (or Latin).
History—Greek and Roman to 800 A. D. (Short study of Eastern nations should precede Greek history).

Second Year (in two-year course).

Higher English (to be coupled with English Classics of this grade).
Algebra finished (½ year).
Bookkeeping ½, or Higher Arithmetic ½, or Physiology ½.
Latin, or Physical Geography, or Botany with laboratory work.
History, Mediaeval, with special reference to England.

Second Year (in a three-year course).

Higher English (same as above).
Algebra finished ½, Geometry ½.
Latin or Physical Geography, or Botany with laboratory work.
History (same as above).

Third Year.

Study of English and American Authors with Composition work.
Geometry finished.

Select any two of the following:

Latin, first, second, or third year, according to whether it has been taken before.

History, Modern, with special reference to England, if course is four years' course, and American History and Constitution if course is three years' course.

Physics, or Botany, or Geology ½, with Bookkeeping or Higher Arithmetic the other ½, or Elementary Political Economy ½ and Review ½.

Fourth Year.

Study of American and English Authors with Composition work.
History, American with Constitution.

Select any two of the following:

1. Latin or German.
2. Chemistry or Physics.
3. Geology ½ and Zoology ½, or Astronomy ½.
4. Elementary Political Economy ½ and Review ½.

Themes and orations last two years.
Music and drawing are additional to above.

REQUIREMENTS FOR ENTRANCE

The requirements for entrance to the First and Second classes of the University have been noted under the general entrance requirements of the University, and follow, in the main, the State High School Course.

COURSES OF STUDY IN UNIVERSITY ACADEMY

The following shows the Course of Study in the University Academy, and how graduates of two-and three-year high schools enter the University.

The work scheduled below is to be taken as laid down, no elections other than those noted to be allowed. Students from two-year high schools enter the First Class; students from three-year high schools enter the Second Class.

FIRST UNIVERSITY CLASS

Which students from two year high schools enter

1. Plane Geometry. One year, five times per week.
2. English. One year, four times per week.
3. Science (Botany and Zoology). One year, four times per week.
4. Latin (first year). One year, five times per week.
   In case students have had one year of Latin, they take second Latin here. Students entering this class without Latin take two years of Latin for entrance to Freshman year.

SECOND UNIVERSITY CLASS

Which students from three year high schools enter

1. Mathematics or Science—
   First Semester.
   a. Solid Geometry. Five times per week. For all students from three year high schools that are not full three year schools, as a review; and for all students finishing first year University Academy.

   or

   b. Botany. Four times per week. For students from full three year high schools. Except that all students who are to take regular courses in Science or Engineering, or in General Scientific Group of the A. B. Courses, are advised to take "a" as a review.

   Second Semester.
   a. Algebra (Wells' Essentials) reviewed. Five times per week. For all students from two year high schools that are not full two year schools, except students for the Science and Engi-

neering Courses, and for General Scientific Group of A. B. Courses who take "b."

or

b. Higher Algebra. Five times per week. For all students of either two year or three year high schools who are to take regular courses in Science and Engineering, or General Scientific Group of A. B. Courses.

or

c. Zoology or Ethnography. Four times per week. For students from full three year and two year high schools, except those who are to take Science and Engineering Courses, or General Scientific Group of A. B. Courses, or unless a or b is elected, which is strongly advised as a preparation for Freshman year mathematics.

2. English. One year, four times per week. Students from schools that are not full two year or three year schools will take one hour extra English, making five times per week.

3. Latin (second year). One year, four times per week. Students entering the Second University Class in 1902-03 without Latin will take first Latin here, as only one year of Latin will be required for entrance to Freshman year until September, 1904. Students who have had two years of Latin take third year Latin here.

4. a. Botany and Zoology. One year, four times per week. For students who take mathematics in both semesters under No. 1 and who elect Botany and Zoology instead of American History and Constitution below.

or

b. American History and Constitution. One year, four times per week. For students who elect it in place of Botany and Zoology, or have it in No. 1. In 1904 the history will be required either in the first or second year of the Academy.

Graduates of full four year high schools and students who have finished fourth year of the University Academy enter the Freshman year.

COURSES IN DETAIL IN UNIVERSITY ACADEMY

ENGLISH

Candidates for Academy English may present exercise books showing work of their first year, from schools accredited in English and Literature, properly certified (as specified under Entrance Requirements in English Composition), or be examined. The examination questions will be based upon the three lists of books specified in Entrance Examinations under ninth, tenth and eleventh grades (or equivalents) and the student will have opportunity to select from assigned topics such as have come before him in his two or three years of high school work. Topics in English composition will be selected from the list for *reading*, and topics in English literature from the list for *careful study*. Knowledge of the essentials of English grammar will also be tested. No candidate will be accepted in Third or Fourth year English Composition or Literature whose written work is seriously defective under any of the points specified under Entrance Requirements.

1. Third Year English Composition.

This course gives training in the mastery and organization of material. It gives constant practice in the structure of the sentence, the paragraph, and composition, under the forms of prose, especially narration and description. A one-hour course. Text-book: Genung's Outlines of Rhetoric.

2. Fourth Year English Composition.

This course is devoted to the acquisition of vocabulary and skill in the use of it. Attention is given to the principles of composition, and essays in description, narration and exposition are required. A one-hour course. Text-book: Meiklejohn's The Art of Writing English.

3. Third Year English Literature.

Special attention is given to historical setting, author, criticism of style, discussion of character, and plot. Text-book: Brooke's English Literature. Works read and studied carefully: List selected from University entrance requirements, eleventh year list preferred, although equivalents will be accepted. A two-hour course.

4. Fourth Year English Literature.

This course is devoted more especially to the study of American Literature. It is conducted much the same as the Third Year course. Text-book: Tainter's Introduction to American Literature. Works read and studied carefully: List selected from University entrance requirements, twelfth year list preferred, although equivalents will be accepted. A two-hour course.

MATHEMATICS

Plane Geometry—First University Class.

One year will be devoted to Plane Geometry. Much stress will be laid upon original work and applications, and a large number of original exercises and numerical problems will be solved.

Solid Geometry—First Semester, Second University Class.

Solid Geometry will be treated along the same lines as Plane Geometry above.

Algebra Review—Second Semester, Second University Class.

Will be devoted to thorough review of essential parts of Elementary Algebra represented by Wells' Essentials.

Higher Algebra—Second Semester, Second University Class.

For scientific and engineering students. This course involves a thorough review of Algebra, with special reference to the needs of students who are to pursue more advanced Mathematics. Among the subjects treated with special care are all forms of quadratic equations, exponents, radicals, logarithms, ratió and proportion and progressions.

HISTORY

American History and Government.—A course in American History and Government, five hours during the year, will be given for the benefit of First and Second University Class students. This course will be regarded as preparation for the work in Freshman history. Books used: Channing's Student History of the United States; Strong and Schafer's Government of the American People.

SCIENCE

Botany. This course includes a study of as many orders as possible of Algae, Fungi, Mosses, Ferns and Flowering Plants, paying especial attention to their relations to each other and also to the animal kingdom; their modifications adapting them to climate, soil, moisture, etc. This course will lead up to the courses in Botany as given in the University.

Zoology. In this course the aim will be to familiarize the student as far as possible with the common forms of animal life, from the highest to the lowest. The structural anatomy of a few types will be studied with care. Each student will study in the field as much as possible, noting the habits and environment. This course will lead up to the course in Zoology as given in the University.

Ethnography. A course in the study of races as to distribution, forming an introduction to the courses in History, and the course in Anthropology in the department of Economics and Sociology.

LATIN

First Year Latin

Collar and Daniell's First Year Book forms the basis of study during the first semester and first half of the second semester of the First University Class. The remainder of the year is spent in the study of some secondary Latin reading, such as Viri Romae, or the Lives of Nepos, or the Breviary of Eutopius.

Second Year Latin

Caesar's Gallic War is begun with the opening of the college year. Four books form the minimum. If circumstances permit, much more is read, if not, from the remaining books of Caesar, from Sallust's Catilina or, Jugurtha. Allen and Greenough's Latin Grammar is used. For Second University Class.

THE SCHOOL OF MUSIC

FACULTY

The Faculty of each school or college consists of the President of the University and the resident professors, assistant professors, lecturers and instructors giving instruction.

HISTORY OF MUSIC

1. From the age of Primitive man to the time of Palestrina (1524 A. D.), tracing the evolution of music as an art in the various countries. This is given in a course of lectures once a week, and is open to all University (college) students as an elective course for one credit, and also to all those studying in the musical department.

2. From the time of Palestrina to present. Text-book: Ritter or Mathews, with lectures and extracts from the works of different composers. Elective course. Open to all those who have taken "Primitive Music." One credit.

HARMONY

1. Harmony and Theory through suspensions. Text-book: Jadassohn. Elective. One credit.

2. Harmony and Harmonization of Melodies. Jadassohn and Bannister. Open to all those who have taken Harmony and Theory. Elective. One credit.

3. Counterpoint. Text-book: Richter. Open to all those who have taken Courses 1 and 2. Elective. One credit.

4. Form. Text-books: Mathews and Goodrich. Open to all those who have taken Courses 1, 2 and 3. Elective. One credit.

THE PIANO

Preparatory Course.—Technique: Scales, keys, etc. Studies, Czerny, Op. 821; Duyernoy, Op. 120; Czerny, School of Velocity. Sonatinas and easier sonatas by Kuhlau, Clementi, Beethoven and others. When students are able to meet requirements mentioned under Course in Music, they will be admitted into the Freshman year.

Freshman Year.—Technique: Little Preludes and Fugues. Bach. Studies selected from Berens, Op. 33, 3 books; Czerny, Op. 299.

Sophomore Year.—Technique; Inventions, 2 and 3-voiced, Bach. Studies selected from Czerny, Op. 553 and Op. 740; Aloys Schmidt, Op. 16; Doring Octaves, Op. 24.

Junior Year.—Technique: English Suites, Bach; Studies selected from Cramer, 4 books; Clementi (Gradus); Kullak Octaves, part 2.

Senior Year.—Technique: Preludes and Fugues (Well-tempered Piano), Bach; Studies selected from Chopin, Rubinstein, Liszt, Thalberg, Godard, Henselt and others.

Standard classic sonatas and concertos, and pieces by modern composers will be liberally used through the entire course, and no student will be expected to take the entire list of studies given, but only such as may be especially fitted to remedy individual defects.

Each student will be expected to make at least one public appearance each year at the students' recitals, and at the close of the fourth year will play a recital program entirely from memory.

SINGING

First Year.—Breathing, tone placing, phrasing, with appropriate exercises. Abt's Tutor.

Second Year.—Studies, Concone, Op. 9.

Third Year.—Studies, Concone, Op. 10.

Fourth Year.—Vaccai, Passages from Operas and Oratorios for the trill and cadenza.

CLASSES IN SIGHT READING

Songs and concerted vocal music will be selected from the best German, French, English and American composers, with arias from standard operas, that may be especially adapted to the individual style and ability of each student.

Vocal lessons may be taken as an elective course for one credit. A testimonial and record of work done will be given to any student upon application at the end of any year.

ORGAN LESSONS

Pipe or Reed Organ.—Special attention to phrasing and expression.

MUSICAL SOCIETIES

Membership either active, student or associate, in the Ladies' Musical Club is open to all students in the Musical department. The meetings are held every three weeks, and a specialty is made of playing standard orchestral works, arranged for two pianos, eight hands, which are often analyzed and studied before they are played. In this way the student becomes familiar with the masterpieces of musical literature. These are interspersed with solo, duet and concerted numbers, both vocal and instrumental.

The Oratorio Society has produced an Oratorio in Villard Hall every year since '96. A Music Festival of three days was held last year and Hayden's Creation with a chorus of 100 voices and an orchestra of twenty-two was given under the direction of Mr. W. Gifford Nash.

A course in Music leading to the degree of Bachelor of Music (Mus. Bac.) is offered. In this course the piano will be taken as a major study, and history of music, harmony, counterpoint, form, modern languages, English literature, history, and a certain number of electives, will be required of all candidates for this degree. For particulars, address the director.

University students, as candidates for degrees other than Mus. Bac., can take any of the theoretical courses as electives.

EXPENSES AND MISCELLANEOUS

To all those taking piano work as an elective course, terms for piano lessons will be $4.00 per month for one 45-minute lesson per week, invariably in advance. Such students will be expected to practice from one to two hours per day. Two credits.

For those not able to afford these terms, good instruction can be had from the assistant in piano for $2.00 per month, and along the same lines of study as those given by the Director. Such students will also appear in the student recitals in Villard Hall, and the director will hear them play, and generally oversee their work once a month in the presence of the teacher.

No deduction will be made for absence from lessons, except in case of protracted sickness, when half the loss will be sustained by the department, and all lessons falling upon legal holidays or vacation days will not be made up. Instruments for practice, sheet music and books will be furnished at the student's expense.

Taken as an elective course, the same rules and regulations regarding absences from recitations and progress made will be enforced as are customary in other departments of university work.

Pianos can be rented for $3.00 per month. Early application should be made to George F. Craw or F. A. Rankin, both of Eugene, before the fall semester begins, as the supply is limited.

In many places where boarders are taken there are pianos, the use of which can be had for a nominal figure.

EQUIPMENT

The music rooms are situated in the south entry of the Dormitory. The piano room is furnished with two pianos, which are both used with advanced students, the second piano taking the accompaniments to such works as were composed for a solo piano with orchestra. The singing room, which is also in the south entry of the Dormitory, has one piano.

In the University Library are many works on history of music, Groves' Dictionary of Music and Musicians, and the latest books on music by such men as Henderson and Krehbiel.

COURSES OF INSTRUCTION IN ACADEMIC COLLEGES AND SCHOOLS

1902–1903.

The following list shows the organization of the courses of instruction. Not all of the courses named can be given in 1902–1903. Many are to be given in alternate years. Departments will be developed and the number of courses increased as rapidly as the demand and the circumstances will permit.

ANTHROPOLOGY

(See Economics, Etc.)

BIOLOGY

Assistant Professor Sweetser.

(a) Introductory Courses as a foundation for study in Zoology and Botany; (1) for students preparing for the study of Applied

Science; (2) for students seeking general culture; (3) for students preparing for the study of Medicine.

(b) Intermediate Courses for students preparing for more extended study in Zoology, Medicine, Physiology, Embryology, Botany, Palaeontology, Geology.

(c) Advanced Courses for students in the Graduate School, and for those seeking specialized study and research as far as the resources of the department will permit.

Course 1 is introductory and is naturally followed by 2. It is well accompanied by 4 and 5; 4 and 5 are such courses as are given in the same field to undergraduates at Johns Hopkins and Harvard. Courses 6, 7, 9, 10, 11, 12 are courses preparatory to Medicine, but both 10 and 11 should be taken by those intending to specialize in Zoology and 7 by those intending to specialize in Cryptogamic Botany. The special courses 10, 11, 12, 13, must, in the case of undergraduates, be preceded by 1 and 2. Courses 6, 14, 15, must be preceded by 4 and 5. Special students may elect any of these at the discretion of the instructor.

Students in the Short Course Preparatory to Medicine and Dentistry should observe the following sequence: 1, 2, 3 (or 3 alone), 10, 11, 9, 12. Courses 9, 11, 12 are well taken in the Senior year, 10 in the Junior year; 1 and 2 (or 3) in Freshman and Sophomore years, respectively. No student will be permitted to elect 10 who is not deemed thoroughly competent by reason of previous work.

Students intending to teach are advised to pursue the following order as far as possible: 1, 2, 3, 4, 5, but 4 and 5 are well taken with 1. Those intending to specialize in Biology should take 1, 4, 5, 2, 3, and then be guided in subsequent work as far as possible by their preferences. Students proposing to study Pharmacy should elect 1, 4, 5, 6, and are strongly urged to take most or all of the work in the Course Preparatory to Medicine and Dentistry.

The laboratory is well equipped with bacteriological apparatus and premedical students who are qualified are advised to take this course.

Histology must be preceded or accompanied by Mammalian Anatomy.

Embryology must be preceded by Histology.

Physiology must be preceded by Histology and Elementary Physics and Chemistry. In special cases it may be taken in conjunction with either one of these two latter courses.

EXPENSES

In accordance with a ruling of the Board of Regents all students in laboratory courses are charged with a fee sufficient to cover all waste and breakage. This does not include cost of specimens for dissection or material for sectioning. The cost of these is only nominal.

The fees and deposits are as follows: In courses 1, 2, 3 and 4, a fee of 50 cents for each course. In each of the courses 6, 7, 9, 11, 12, a deposit of $4.00 is required. In course 10, $5.00, $2.00 of which is in each case refunded at the end of the year upon return of keys and apparatus in good condition. In course 9 a deposit of $4.00 is required, all of which is returned at end of year, provided none of the material is lost or broken.

1. Animal Biology. (Zoology.) Study of types of invertebrate animals, from simple to more complex forms with reference to structure and relationship. Intended as an introduction to all the higher courses in this department, or to be regarded as a culture study, affording a student a general idea of the different phenomena of animal life. Students are urged to take Course 4 in connection with Course 1. Three hours. Lectures and laboratory work.

2. Vertebrate Anatomy. (Zoology.) A continuation of Course 1. Dissection of Vertebrate Types, study of relationships, distribution, habits, etc. A culture course, but strongly recommended to students preparing for medical schools or for those intending to specialize in biology. Students must furnish their own material for dissection. Two hours.

3. Mammalian Anatomy. Dissection of a typical mammal. Intended as a preparation for Courses 10 and 12. Two hours during first semester. Should be preceded by 1 or 2.

4. Botany. Morphology, physiology, and classification of Cryptogams. A companion course to 1. Three hours during first semester.

5. Botany. Structure and classification of flowering plants. Plant analysis. Three hours during second semester.

6. Medical Botany and Pharmacognosy. The study of some typical medicinal plants, their structure, medical properties and common adulterants. Must be preceded by 5. Text-book: Sayre, "Organic Materia Medica and Pharmacognosy." Four hours during second semester.

7. **Bacteriology.** Laboratory technique and recitation, methods of staining, examining and cultivating. Must be preceded by 10. Advised for students intending to study medicine. Open to Seniors, Laboratory book, Moore; text-book, Muir & Ritchie. Three hours.

The laboratory is well supplied with apparatus.

8. **Current Literature.** A Journal Club open to the more advanced students in the department. Students present abstracts of articles in current biological literature and read standard works on biology. Once in two weeks at home of instructor. One hour.

9. **Human Osteology and Syndesmology.** A thorough study of the human skeleton. Must be taken by those intending to anticipate the first year in the School of Medicine. The University has an extensive collection of disarticulated human skulls and skeletons. Four hours. Text-book: Gray's Anatomy.

10. **Normal Histology.** Lectures, recitations, laboratory work, the latter consisting of the study of the leading tissues of the human body, and preparation of tissues by the individual student, who learns methods of hardening, staining, imbedding, etc. Must be preceded or accompanied by Course 3. Prescribed for those intending to enter the second year of the Medical School Course. Students furnish their own material for sectioning. Three hours. Text-book: Piersol.

11. **Vertebrate Embryology.** Study of embryonic development of chick and comparison with that of other vertebrates. Must be preceded by No. 10. Four hours second semester.

12. **Advanced Physiology.** Prescribed for those intending to anticipate the first year in the Medical School. No student can elect this course who has not had elementary work in physics and chemistry and has not passed satisfactorily in mammalian anatomy and histology. Laboratory work consists of experimentations in salivary, pancreatic and gastric digestion, tests for proteids, bile salts, etc., pulse, apex beat under different conditions, effect of drugs on mammalian heart, qualitative analysis of blood and urine, obtaining glycogen, properties of contractile tissue and nerve, action of cilia, etc.

Each student uses centrifuge, kymograph, sphygmograph, manometer, tambours, time-marker, muscle lever, induction coil, etc. Two hours.

COURSES FOR GRADUATES AND ADVANCED UNDERGRADUATES

13a. Ornithology. Study of the classification of birds. Training in identification, and study of local bird fauna. Incidentally, methods of collecting, preserving, labelling, etc. Four hours a week in first semester.

13b. Entomology. Study of typical insects and groups of insects. Collecting and preserving. Four hours a week in second semester.

14. Systematic Botany. a. Structure, classification and relationship of the cryptogams. Mycology and Algology. Hours to be arranged.

b. Structure, classification and relationship of the higher cryptogams, mosses and ferns. Also a similar study of phenogams. Hours to be arranged.

15. Plant Physiology. This will include a more or less extended study of the functions of vegetal life. Hours to be arranged.

EQUIPMENT

The Biological Department is thoroughly equipped for work. It has a large lecture room and operating room, combined, and a large, well lighted laboratory. The equipment of the department includes among other things fourteen compound and dissecting microscopes, with low and high power objectives, including a one-twelfth homogeneous immersion lens; camera lucidas, embryograph; instruments for microscopic measurements; microtome, imbedding baths, incubators, digestion oven, Fick's spring monometer, Marey's tambours, kymograph, sphygmograph, induction coil and battery, time marker and clock, centrifuge with tubes, and haematokrit, etc.

It has also a series of skulls and skeletons, illustrating structure of different mammals, birds and reptiles; articulated and disarticulated human skeletons; many human skulls, disarticulated, sectional and foetal.

The museum contains a fine series of mounted and unmounted birds and mammals, to illustrate different groups; a collection of Oregon reptiles, made by Mr. J. R. Wetherbee; a series of fish, mostly Salmonidae from the Columbia river, donated by the United States Government; a collection of food fishes of the Oregon coast, made by Mr. B. J. Bretherton, of Newport, Oregon, and presented to the University.

It is further supplied with an excellent series of invertebrate animals, models of types from France and Germany, and a fine series of botanical models of types of various groups of flowers, and of representatives of insectivorous plants. To this must be added casts of brains and head formations of various races, and a particularly fine series of wax models made from drawings by His in Ziegler's laboratory at Freiburg, illustrating different stages in the development of the human embryo and that of the chick; also a similar series showing the development of amphioxus, different forms of segmentation, etc., etc.

The laboratory is supplied with a large aquarium for the preservation of specimens, and both laboratory and lecture room are lighted by electricity and furnished with gas from the plant of the University. Constant additions are being made to the apparatus and collections.

In view of the limited resources in the way of assistance in this department, the instructor reserves the right to omit any elective course which appears to conflict with more important work.

CHEMICAL ENGINEERING

(See Chemistry and Engineering.)

CHEMISTRY

The work of the department of Chemistry is intended to accomplish several ends: In the first place, and most important, to give a thorough training in the principles of the science and in laboratory manipulation; secondly, to prepare students for the study of medicine, pharmacy, mining and other subjects in which chemistry plays a large part; and thirdly, to fit teachers with the experience necessary for independent work. Below will be found a full description of the courses of instruction offered by this department.

REGULATIONS GOVERNING THE USE OF APPARATUS AND CHEMICALS

In providing free instruction in the various branches of learning, the University is under no obligations to furnish the materials used by each student in his work, such as text books, note books, pencils, etc. In addition to the ordinary equipment of the student, work in the

Chemical Laboratories requires a somewhat large outfit of apparatus and chemicals for the separate use of each individual. For each student to purchase this outfit from a dealer would involve loss of time, a considerable cost and much unnecessary waste. As a matter of accommodation, therefore, the University undertakes to supply students with necessary chemicals, and to *loan* apparatus, on the following terms. It should be distinctly understood that students may, if they wish, purchase apparatus and chemicals wherever they choose, if they find they can do so more cheaply.

1. A deposit of ten dollars must be paid for each course in which the student registers. This deposit must be paid to the Steward, who will give a receipt. No desks will be assigned, or supplies given out, until this deposit has been paid.

2. Upon presenting this receipt at the laboratory, each student will receive a complete outfit of apparatus needed for his work, and chemicals as required for each period.

3. The apparatus and chemicals thus furnished will be charged to the student's account, and he will be held personally responsible for them, as well as for any damage he may cause to laboratory property. At the end of the year, or whenever he leaves the laboratory, all apparatus *in good condition* may be returned to the storeroom, and will be credited to his account. The balance, if any, will be paid in cash. Students usually receive from one to three dollars at the end of the course, according to the care they have taken of their apparatus.

4. If additional apparatus is needed at any time the student must purchase a coupon of the Steward, which will entitle him to its equivalent value in apparatus. For the present, these coupons will be issued in sums of one dollar. Unused portions of coupons will be redeemed in cash when the student's account is closed. The price at which apparatus is sold will be posted in the laboratories. The cost of chemicals varies from three to six dollars, according to the nature of the work.

In view of the above regulations, every student intending to take work in chemistry should come to the University provided with the necessary fees; only in this way can delays be avoided. To enter upon laboratory work after regular instruction has commenced is a serious handicap.

1. General Chemistry. This course, or a satisfactory equivalent, must be completed before any other work in this department can be

taken up. It consists of three lectures and two laboratory periods per week, throughout the year. The time required for the laboratory work is four hours. The course serves as a general introduction to the science, and devotes considerable attention to the practical application of chemistry to daily life and manufactures. Storer and Lindsay's Manual of Chemistry is used as a text book. Five hours.

2. Analytical Chemistry. Qualitative and Quantitative. This is a year course, but each half may be taken independently if desired. The course will consist of two lectures and three laboratory periods per week, each laboratory period varying from two to three hours. In addition to the ordinary methods of analysis, each student will prepare and analyze a number of pure inorganic salts and compounds as a regular part of the work. Text books will be announced before work commences. Five hours.

3. Organic Chemistry. Three lectures and two laboratory periods per week throughout the year. This course while intended chiefly for students making a profession of chemistry, serves as a valuable introduction to the study of medicine, pharmacy and physiology. No one text is followed, the student being expected to refer to several standard works on the subject. The laboratory work serves to illustrate the properties of the substances studied. The course must be preceded by Courses 1 and 2. Five hours.

6. Introduction to Mineralogy. The recognition of common minerals by simple methods. This course serves as an introduction to assaying, metallurgy, and mineralogy proper. One lecture and six laboratory hours per week, first semester. One and one-half credits.

7. Assaying. The fire assay of gold, silver and lead ores, and the wet assay of copper ores and bullion. This course involves the complete assay of actual working ores, as obtained from the mines, as well as of commercial products containing the above metals. The assay outfit is exceptionally complete. One lecture and six laboratory hours per week, second semester. One and one-half credits. MR. STAFFORD and MR. RENSHAW.

COURSES FOR GRADUATES AND ADVANCED UNDERGRADUATES

20. Chemical Seminar. This is a new course designed to replace the Chemical Club. The seminar meets once a week, and *must be*

attended regularly by all students enrolled in any of the following courses. It will be devoted to the discussion of all advanced laboratory work, and to the study of original articles in the chemical magazines. A program will be arranged in advance, in which members of the seminar and the instructors will participate. One hour.

4. Advanced Analytical Chemistry. A course designed for students who wish to specialize in analytical work. It must be preceded by Course 2. Students should not elect this course before their Senior year. Twelve hours per week during the first semester. Three credits. MR. STAFFORD.

5. A Continuation of Course 4 during the second semester. Twelve hours per week. Three credits. MR. STAFFORD.

10. Industrial Inorganic Chemistry. A course in the practical manufacture of inorganic chemicals. Starting with crude or impure materials, each student is expected to manufacture a considerable number of pure chemicals and reagents in quantities sufficient to supply the laboratory for several years. The purity of the substances thus prepared must be demonstrated by analysis. Credits (not to exceed eight) will be given according to amount of work undertaken.

11. Industrial Organic Chemistry. A course similar to the above, devoted to the manufacture of organic chemicals. Credits not to exceed eight, as in Course 10.

18. Electro-Chemistry. A laboratory course in the applications of electricity to metallurgy and chemical manufacture. Open to qualified students with a sufficient training in physics and in chemistry. Credits not to exceed eight, as in Course 10.

The following courses will not be given regularly for the present; but if a sufficient number of students apply, one or more classes may be organized.

8. Metallurgy. Four lectures per week on the general treatment of ores in the smelter. Including a brief treatment of the subject of ore dressing. Must be preceded by Courses 6 and 7. Second semester. Two credits.

12. Metallurgy of Gold and Silver. The methods of milling and smelting gold and silver ores. Four lectures per week during the first semester. Two credits.

13. Metallurgy of Copper. Matte smelting, electrolytic refining,

etc. Four lectures per week during the second semester. Two credits.

9. **Systematic Mineralogy.** Four lectures per week, including a brief outline of physical crystallography. Introductory to the study of metallurgy. No laboratory work is included in this course, as minerals form the chief materials in the practical analytical work described above. Must be preceded by Course 6. First semester. Two credits.

14. **Industrial Analysis.** Must be preceded by Courses 4 and 5. The analysis of iron and steel, coal, furnace gases, etc. First semester. Two credits.

15. **Organic Industrial Analysis.** The analysis of oils, fats, foods, drugs and similar products. Must be preceded by Courses 1, 2, 3, 4, and 5. Second semester. Two hours.

19. **Advanced Organic Chemistry.** Primarily for graduates. Four lectures and sixteen laboratory hours per week. First semester. Six credits.

17. **Physical Chemistry.** Four lectures per week. A full treatment of the more important chapters of this subject. This course must be preceded by Courses 1, 2, and 3, by two years' work in Physics, and by a course in differential and integral calculus. While intended chiefly for graduate students, the course is open to qualified undergraduates. Second semester. Two credits.

The Chemical Laboratory occupies thirteen rooms in the new McClure Hall. The building is provided with thorough ventilation by means of a Sturtevant exhauster; power being supplied from an electric motor. Every room is wired for light and for power. The laboratories for student use contain over 200 individual lockers. The lecture room will seat 115 persons, and is equipped with all the furniture and apparatus needed for the most elaborate demonstrations.

Among the more important apparatus with which the laboratory is supplied, the following may be mentioned: Five analytical, three assay and one lecture room balance; Hempel's and Lunge's apparatus for gas analysis; six large and three small assay furnaces; a rock crusher and a rock grinder, both from the Union Iron Works, San Francisco; two two-horse power electric motors; a Wegelin-Hubner filter press; a centrifugal drier; a Leybold projection lantern with spectroscope and polariscope; a Beckmann sodium press; a Pfungst autoclave; Baeyer's and Eiloart's atom models; Preston's

Crystal Models; and a very complete working outfit for handling chemicals on a large scale. The stock of chemicals and apparatus for student use and for investigations is unusually extensive.

ECONOMICS AND SOCIOLOGY

Professor Young
Mr. Whittlesey

The function of this department is to furnish instruction essential to usefulness in the public service, in journalism, law and the ministry. The system of grouping the courses given below is designed to advance the student naturally and yet make his work complete and serviceable wherever it may be necessary for him to stop.

Group I.—The General Introductory Course gives the student the point of view of modern thought in the economic, political and social sciences, and outlines the general course of progress in each line of social achievement through the lower stages of civilization. Prerequisite, Freshman standing.

Group II.—Comprises the information courses of this department. These courses are especially designed to enrich and make clear the concepts used in all later thinking in the social sciences. Prerequisite, Freshman standing.

Any course of this group may be taken along with the introductory course. It may be taken after the course of Group II of the corresponding science has been taken, but more naturally precedes.

Group III.—Comprises the courses fundamental for all extended study in the respective sciences. If only one course in any science is taken the course of this group should be chosen. Prerequisite, Sophomore standing.

Group IV.—The principles of the sciences as they are developed in Group II are in the courses of this group viewed in perspective, and the broader relations discerned through the study of the historical development of thought in each science. These courses follow those of Group II of the respective sciences.

Group V.—Enables the student to investigate systematically the phenomena of modern society, with the view of developing policies of improvement and reform.

Group VI.—Society is confronted with great problems that challenge a reconstruction of the social organization and a revision of the fundamental conclusions in all the social sciences. These problems are appropriately made the subject of university investigation.

Group VII.—For securing a refinement of methods of investigation and statement of relations in quantitative forms, the methods and principles in the theory of statistics are taught.

A. ECONOMICS

I.

1. General Introductory Course. The theory of evolution in its applications to society; the process in connection with the new elements in the human sphere; the genesis of social life, mind and institutions constitutes the scope of this course. Lectures and readings. One hour, second semester.

II.

1. The Economic History of England. The evolution of the forms of industrial organization from the village community to modern capitalism is traced. The inter-relations of economic conditions and social life in general are emphasized.

Text books, lectures and collateral reading.

This course should be taken by all Freshmen in the Civic Historical course. Two hours, second semester.

III.

1. The Principles of Economics. Text books and reports.

Required of Sophomores in A. B. courses and of Seniors in Engineering courses, except Civil and Municipal. Three hours.

2. Theories of Value and Distribution.

Text book and collateral reading. Four hours.

IV.

1. History of Economic Thought. This course is taken up mainly with an analysis and criticism of economic classics. For graduates and advanced undergraduates. Four hours, first semester.

2. **Philosophy and Economics.** The relations between philosophical and economic speculation, with their casual interaction, are traced. Bonar's Philosophy and Political Economy will be used as a guide. For graduates and advanced undergraduates. Four hours, second semester.

V.

1. **Finance.** Public expenditure, financial administration, taxation and public debts. Text book, Adam's Public Finance. Three hours.

2. **Money, Credit and Banking.** Applications of the principles of economics to modern monetary systems with the view of developing policies of improvement. Two hours. This course alternates with Course No. 1.

3. **Railway Transportation.** A study of the historical, economic and legal phases of the railway as a factor in modern life. For graduates and advanced undergraduates. Four hours, first semester.

4. **Economic Geography.** A study of the character of commercial relations, localization of industries and effect of physical environment on economic life of the United States and other American nations, the chief European nations and such of the Eastern nations as are of especial interest to American commerce.

This course is especially for advanced undergraduates and graduates who wish to make a study of commerce. (See School of Commerce.) Not given in 1902-1903.

VI.

1. **Seminar in Economic Problems.** Questions connected with recent developments in taxation, in trusts and industrial and commercial combinations, and in national expansion. Current economic literature and reports of commissions will furnish main materials for this course. Two hours.

VII.

1. **Statistics.** A course in the theory and methods of statistics, with practical work in investigation and tabulation. For graduates and advanced undergraduates. Two hours.

B. POLITICS

I.

General Introductory Course. See Economics.

II.

1. **Political Institutions of the United States.** These are studied with special reference to their practical working. A study of constitutional law. Bryce, American Commonwealth. Three hours, first semester.

2. **Political Institutions of Europe.** Comparative study of the governments of Europe, especially those of England, France, Germany and Switzerland. A study in comparative constitutional law. Three hours. Second semester.

3. (a) **Jurisprudence.** A general course in Elementary Jurisprudence. (b) A study of the historical development of the Common Law. Two hours, either semester. (a) and (b) alterate; the one will be given which is most in demand.

III.

1. **Political Science.** The nation and the state; idea, origin, forms and ends of the state. Three hours. Text-book: Burgess' Political Science.

2. **International Law.** One hour.

IV.

1. **History of Political Ideas.** A critical study of the leading writers on politics. For graduates and advanced undergraduates. Three hours, second semester.

2. **Municipal Government** in Europe and the United States. Two hours.

C. SOCIOLOGY

I.

General Introductory Course. See Economics.

II.

1. Elements of Society. Society as an organization analyzed for a determination of its characteristics. Text-book and collateral reading. Two hours.

III.

1. Principles of Sociology and Theory of Social Forces. As conceived of by leading modern sociologists. Three hours. For graduates and advanced undergraduates.

2. The Social Debtor Classes. Studies of questions connected with charities, penology and criminology. Three hours, second semester.

3. Democracy. Its characteristics and tendencies. Three hours, first semester.

EQUIPMENT

The equipment for the study of Economics and Sociology includes the standard authorities on these subjects, comprising some 500 volumes. In Economic and Industrial History the equipment in History is available, and the library of the Oregon Historical Society, of several hundred volumes, affords the best possible material for original work in Economics and Industrial History and Theory.

The department also has files of all the leading American journals of Economics and Sociology, and a practically complete file of Government publications.

CIVIL AND MUNICIPAL ENGINEERING AND ASTRONOMY

Municipal (or Sanitary) Engineering will not be given as a separately organized course until later. For the present the elements of Municipal Engineering will be included in the Course in Civil Engineering. As circumstances warrant, separate courses in Municipal Engineering will be given.

It is to be understood that, with the present number of instructors, not all the courses offered can be given in any one year; but the courses actually called for by the progress of the students enrolled

are given, and it is expected that as more courses are demanded simultaneously the number of instructors will be correspondingly increased.

For courses in English, Mathematics, Chemistry, Physics, Geology and Economics, see under these departments.

DRAWING AND DESCRIPTIVE GEOMETRY

1. Mechanical Drawing. Use and care of instruments; plain lettering; elementary projection of points, lines, surfaces and solids, isometric and oblique projections; simple working drawings; shading; section-lining; blue prints. Six hours in drafting room, both semesters, Freshman year.

2. Descriptive Geometry. Orthographic projection of points, lines and solids; traces of lines, planes, and single-curved surfaces; cylinder, cone and double-curved surfaces of revolution; intersection of solids by planes and development of surfaces; intersection of solids by solids; applications. Five hours, both semesters, Sophomore year.

3. Shadows, Tinting and Perspective. An elective course for any one who has had the two preceding. Four hours, both semesters.

SURVEYING AND GEODESY

1a. Elementary Surveying. Land and town surveying; computation of areas; leveling and minor triangulation. Recitations, one hour, Sophomore year, both semesters.

1b. Field and Office Work. To accompany course 1a. Use and adjustment of instruments; surveys of land with chain and compass or transit; differential and profile leveling; heights by barometer; office reductions; plotting; use of planimeter and slide rule. Four hours in field or office, both semesters, Sophomore year.

2a. Topographical Surveying. Analysis of surface lines and slopes; horizontal and vertical location of points; theory of stadia measurements and reductions; contours; methods adapted to small areas; city topography; larger areas. One hour, first semester, Junior year.

2b. Field and Office Work. To accompany course 2a. Complete survey of small area, such as the University campus, a reservoir site, etc.; surveys and maps of extended areas. The work of making a

complete topographical survey of all the region within a radius of several miles of the University has been begun, and a portion of this work will be assigned to each succeeding class, thus affording to each student a considerable experience in the kind of work which he will encounter in actual practice. Four hours, with course 2c, first semester, and first half of second semester, Junior year.

2c. Topographical Drawing. Topographic symbols; hill shading; drawing contour lines; colored topographic drawings; topographic maps. The amount of time given to this course will be taken from the preceding, at the discretion of the instructor.

3a. Elementary Geodesy. Introduced by a brief course in practical astronomy. Determination of latitude, time, longitude and azimuth. Triangulation; precise leveling; figure of the earth, with reduction formulas for surveys and map projections; adjustment of errors; details of field work. Three hours, second semester, Junior year.

3b. Observatory, Field and Office Work. To accompany course 3a. Latitude, time, longitude and azimuth determined by use of the large transit instrument and sidereal clock; also with the sextant, altazimuth instrument and pocket chronometer. Mainly night work at favorable times during the latter half of the second semester. The last two weeks of the semester will be given up exclusively to this work and to the main triangulation upon which course 2b depends. Twelve days, eight hours per day.

3c. Map Drawing. Projection of extended areas according to the various methods in common use. Time for this course will be taken from the two preceding, at the discretion of the instructor.

4. United States Land Surveying. A detailed study of the theory and methods of surveying the government lands. Intended for those who wish to fit themselves for U. S. deputy surveyors. In alternate years.

MECHANICS

Professor McAlister
Mr. Adams

1. Analytical Mechanics. A course designed particularly for engineering students. See under the department of Mathematics. Three hours, both semesters, Junior year.

2. Graphic Statics. Graphic methods of solving problems in the equilibrium of rigid bodies; direct applications of the general principles are made to the determination of stresses in framed structures subject to fixed loads; of shear and bending moment in beams; and of the centroid and moment of inertia of plane areas. Four hours in drafting room, both semesters. Sophomore year.

3. Strength of Materials. Elements of the mathematical theory of elasticity, with applications to beams, columns and struts, shafts, etc. The course for the present will also include a brief study of the results of experimental tests of the strength of the common materials of construction, with tables to be used in practical designing. Five hours, second semester, Junior year.

HIGHWAY AND RAILWAY ENGINEERING

Professor McAlister

1. Roads and Pavements. Survey and location of roads; grades; drainage; foundations; road coverings; crushed rock and gravel. Stone, wood, asphalt and brick pavements; laying out city streets; footwalks, curbs, gutters; maintenance, repair, cleaning and watering. Two hours, first semester, Junior year.

2a. Railroad Engineering. Reconnoisance; preliminary survey; location survey; simple curves; compound curves; transition curves; vertical curves; earthwork; trestles; tunnels; culverts; ballast, ties, rails and rail fastenings; switches and crossings. Two hours, both semesters, Junior year.

2b. Field and Office Work. To accompany course 2a. A preliminary line from two to three miles long is laid out, and a topographical survey is made of the adjacent ground. Each student is then required to determine what, in his judgment, will be the best and cheapest line for final location, the maximum grade and minimum radius of curviture being specified. One of the lines so determined is selected and located on the ground, and cross-sectioned; calculations are made of the earthwork in cuts and embankments, and approximate estimates of the cost of the entire construction, including the necessary structures, such as trestles, culverts, etc. In short, the whole work is carried up to the point of actual commencement of construction. Four hours, both semesters, Junior year.

3. Economic Railway Location. A study of the sources of income; operating expenses; distance, grades and curvature as affect-

ing first cost, maintenance and operation; relative power of locomotives; rolling stock; train resistance, etc. Assigned readings, reports, and recitations from Wellington's Economic Theory of Railway Location, equivalent to three hours for one semester in post-Senior year.

4. Railroad Buildings. A study of standard designs of all kinds of railroad buildings, from the simplest watchman's shanty up to the snowsheds, engine houses, water stations, freight houses, depot buildings, etc., etc. Berg's Buildings and Structures of American Railroads will be used in this course. Three hours, both semesters, post-Senior year.

5. City Railways. Location, grades, curves, construction, maintenance and operation of elevated, surface and underground city railways. Recitations, field work, and assigned readings. The subject of motive power and appliances is not considered in this course. Students who wish to pursue this side of the subject will have to take a number of courses in electrical and steam engineering. Three hours, one semester, post-Senior year.

HYDRAULIC AND MUNICIPAL ENGINEERING

Professor McAlister.
Professor Sweetser.

1. Hydraulics. Hydrostatic pressure in pipes, tanks, reservoirs, etc.; fluid motion; dynamic pressure: theoretical and empirical formulas for flow of water through orifices, over weirs, through tubes, in pipes, conduits, canals and rivers; measurements of water power, with brief reference to common water wheels and turbines. Four hours, first semester, senior year.

2. Elements of Municipal Engineering. A brief comprehensive course in water supply, sewerage and drainage of towns and country districts. Five hours, second semester, Senior year.

3. Chemical Analysis of Water. Elective course in post-Senior year for those who wish to specialize in sanitary engineering.

4. Biology of Water Supplies. Elective course in post-Senior year for those who wish to specialize in sanitary engineering.

5. Water Supply Systems. Amount of water required; available

sources of supply; storage reservoirs and dams; purification works; supply pipes and conduits; city mains and branches; pumping machinery; operation and maintenance. Three hours, both semesters, post-Senior year.

6. Sewerage and Drainage Systems. Detailed designs of sewer systems; disposal works and drains; separate and combined systems; rain fall and run-off; estimating increase of population; sewage per capita; ground water; grades and self-cleansing velocities; use of formulas and diagrams; outfalls; disposal works. Three hours, both semesters, post-Senior year.

7. Irrigation Engineering. Hydrography; rainfall and run-off; evaporation, absorption and seepage; duty of water; sub-surface water sources, artesian wells. Canals and canal works: Surveys, alignment, slope and cross section of canals; head-works and diversion weirs; scouring sluices, regulators and escapes; falls and drainage works; distributary canals or ditches. Storage reservoirs: Location, capacity and construction; earth, loose rock and masonry dams; waste-ways and outlet sluices. Pumping water for irrigation. Five hours, second semester, Senior year.

8. Heating and Ventilation. General principles of heating and ventilating; amount of heat required; systems of piping; radiators and heating surfaces; steam boilers and hot water heaters; theory and design of various systems in use. Two hours, one semester, post-Senior year.

9. River Improvements. A study of the survey of rivers; the design and construction of river improvement works. protection against floods. Assigned readings from the published reports of U. S. engineers. Two hours, one semester, post-Senior year.

10. Hydraulic Motors. Mathematical theory and practical rules for design of water wheels, turbines, hydraulic rams, etc. Recitations, assigned readings, designs and drawings. Two hours, one semester, post-Senior year.

STRUCTURAL ENGINEERING

Professor McAlister.

1. Structural Details. Design of joints and connections used in

bridges and roofs of wood and iron or steel; riveting; bolts and pins; roof trusses. Two hours, first semester, Senior year.

2. **Bridge Stresses.** Determination of stresses in simple trusses, suspension, swing, cantilever and arch bridges, under fixed and moving loads, both for railway and highway bridges. General methods are developed, so that the student may investigate the merits of any proposed form of truss, after which attention will be mainly directed to those forms which have been found most efficient and economical. Both graphical and analytical methods are employed. Five hours, second semester, Junior year, and first semester, Senior year, with Course 3.

3. **Bridge Design.** Complete designs, with detail drawings and estimates of the following: Wooden truss, wooden trestle, plate girder, pin-connected truss for railway, same for highway. Five hours, second semester, Junior year, and first semester, Senior year, divided between Courses 2 and 3 at the discretion of the instructor.

4. **Advanced Bridge Design.** Study of the design of typical examples of swing, cantilever, suspension and arch bridges. Four hours, one semester, post-Senior year.

5. **Bridge Engineering.** Selection of site; survey of site; design and location of abutments and piers; working drawings of substructure and superstructure; methods of erection. Post-Senior year. Number of hours will be determined largely by the student's needs and desires.

6. **Masonry.** Characteristics and requisites of good materials in stone, brick, lime and cement, sand, gravel and broken stone; preparation of mortar, concrete and artificial stone; masonry construction in stone and brick; ordinary and pile foundations; foundations under water; design and construction of masonry dams, retaining walls, bridge abutments and piers, culverts, masonry arches. Recitations, designs, drawings and estimates. Three hours, both semesters, Senior year.

ASTRONOMY

1. **General Astronomy.** A course embracing a brief historical sketch of the science, the fundamental principles, with such problems as yield to elementary methods of treatment, and an exposition of the more important facts known in reference to the bodies of the solar system, the stars, star clusters and nebulæ, tides as cosmogonic

agencies, and a comprehensive account of the Nebular Hypothesis. Observatory work will be carried on as the weather permits. Three hours.

2. Spherical and Practical Astronomy. Lectures, observatory work, and computations. The observatory is provided with a good transit instrument, a sidereal clock, and a sextant with artificial horizon. The transit instrument is so arranged that it may also be used as a sight-seeing telescope. Three hours.

3. Elements of Celestial Mechanics. A course developing fundamental principles and theorems of the subject, and designed as an introduction to the following course, or as a preparation for further independent study. Three hours.

4. Theoretical Astronomy. Fundamental problems in celestial mechanics, including determination of the orbit of a heavenly body from given observed places; correction to be applied to the orbits; special perturbations; determination of the mass of a planet, etc. A knowledge of spherical and descriptive astronomy, differential and integral calculus, differential equations, solid analytical geometry, and the elements of analytical mechanics is required. Five hours.

EQUIPMENT

THE HALL OF ASTRONOMY is situated on the Collier tract, and contains four convenient and well lighted rooms. In the astronomical room are located the sidereal clock and the astronomical transit upon brick piers built independent of the flooring. The transit instrument has a three-inch objective and forty-inch focal length, and the usual accessories of vertical circle and levels. For sight seeing, it is removed from the fixed standards and placed upon a special tripod. A fine sextant with artificial horizon also forms part of the equipment.

THE DEPARTMENT OF CIVIL ENGINEERING is located in the Power House and has the various surveying instruments named below, and also a large draughting table used in the construction of large maps and drawings. The surveying department is provided with the following instruments: Surveyor's transit, Burt's solar compass, plane-table with the best modern improvements and attachments, compass with graduated limb reading to minutes, vernier compass, engineer's y-level, sextant, polar planimeter, mercurial barometer, aneroid barometer, eight-inch

vernier protractor reading to minutes; leveling rods, ranging poles, engineer's and Gunter's chains, steel tape, etc. There is on the same floor a lecture and recitation room, which is provided with celestial, terrestrial and slated globes.

On the first floor is a draughting room, which is fully equipped with tables, sets of first-class instruments, water-colors, colored inks, blue-print apparatus, a fine section-liner, and a few standard works on drawing.

ELECTRICAL ENGINEERING*

Mr. Dearborn
Mr. Wold

1. Elements of Electrical Engineering. Electromagnets and dynamos. This course develops the fundamental theories of magnetic lines of force, the laws of magnetic circuits, and the theory of the direct current dynamo. Five hours.

2. Alternating Currents and Alternating Current Machinery; Dynamo and Motor Practice.—The theory of the alternating current; the designing and the constructing of alternating current dynamos, transformers and motors; methods of testing alternating current machinery; application of single-phase and poly-phase systems. Four hours.

3. Transmission of Power and the Electric Light. A careful study of the losses due to the resistance of conductors, the development and utilization of high potential currents, the erection and cost of distributing lines, and the important features of arc and incandescent lamps. Three hours.

4. The Telegraph and the Telephone. Various systems of telegraphic communication, such as multiplex, autographic and wireless; the telephone, telephone central stations and telephone lines. One hour.

5. Electric Railways. A study of the methods of designing, installing and operating electric railways. Three hours.

6. Station Management and Estimates. The cost of power and

* These courses are subject to revision.

generating plants, selection and cost of distributing lines; selection and economical management of electrical machinery. Two hours.

7. Electrical Measurements. A laboratory course for the development of skill and efficiency in the use of various electrical instruments, such as galvanometers, voltmeters, dynamometers, potentiometers, electrometers, etc. One hour.

8. Calibration of Electrical Instruments. The practical calibration of rheostats, galvanometers, ammeters, voltmeters, wattmeters, condensers and sechometers. One hour.

9. Electrical Testing. A laboratory course for the experimental study of electrical circuits, dynamos and motors; the plotting of characteristic curves, and the determination of the efficiency of dynamos and motors. One hour.

10. Thesis. Description of investigations and measurements. Two hours.

11. Graduate Courses. Advanced courses will be given in the Electrical Engineering laboratory as called for.

EQUIPMENT

The equipment of the Physics Laboratory and of the Department of Mechanics will be at the disposal of the course in Electrical Engineering. (See Physics and Mechanics.)

The new Power Plant and Hall of Engineering will be devoted in part to electrical engineering and will greatly increase the facilities of the University in this line. The equipment in electrical apparatus will be enlarged as rapidly as possible.

ENGLISH

Professor Carson
Professor Glen
Assistant Professor Howe
Miss Roe
Miss Slater

Six objects are contemplated in the following courses:

1. An ability to appreciate, enjoy and criticise justly the best in English Literature.

2. A scientific knowledge of the origin and development of English Literature in general, and of special periods in particular.

3. Proficiency in English composition.

4. A scientific knowledge of the laws of written and spoken discourse.

5. An ability to apply the methods of philological science to the English language.

6. The ability to appear before an audience with composure and speak so as to be heard, to be understood, and to be believed.

All students, regular and special, who take up the work in these courses must present fourteen hours of entrance English. After September, 1902, the entrance English requirements will conform to the State High School Course. Under rhetoric, criticism and English composition, 1a or 1b is required of all Freshmen in all courses. Two is required of all Sophomores in A. B. courses, and of Juniors in the four-year pre-medical course and the scientific courses. Three is required of all Sophomores in A. B., pre-medical and scientific courses. Under English Literature and Early English Literature, number one (first and second semesters) is required of all Freshmen except in four-year pre-medical and the scientific courses. In them the courses are required of Sophomores.

1. Rhetoric, Criticism and English Composition. The courses in English Composition comprise papers under description, narration, exposition, and criticism, followed by forensics, analysis of masterpieces of argumentative composition, short stories and orations. In the Junior and Senior courses in orations, lectures are given concerning the differences between spoken and written discourse, the characteristics of the oration, the nature and purposes of persuasion, the laws of good prose.

1a. English Composition. Elements and principles of effective composition in English prose. Three methods are used: (1) the analysis in class of choice bits of literature; (2) constant practice in exercises in class and outside under grammatical rules and requirements; (3) the preparation of six short themes. Text book, Carpenter's Exercises in Rhetoric and English Composition. 1a or 1b prescribed for all Freshmen in all courses. One hour.

1b. English Composition. The course aims: (a) to secure knowledge of the fundamental principles of composition; (b) to secure skill in the construction of sentences and paragraphs and in outlining. These subjects are reached through text book, lectures, analysis

and construction work. Six themes are required. Text book: Scott and Denney's Paragraph Writing. Open to Freshmen with special preparation. One hour.

2. Rhetoric and Criticism. A good deal of written work is done to develop accuracy, originality and creative power. The first half of the year is given to the study of style, and exercises are written giving special attention to diction, figures and structure of sentences and paragraphs. The second half of the year is given to invention. Exercises are written illustrating the essentials of description, narration, exposition and the different forms of argument. Text books: Genung's The Working Principles of Rhetoric and Genung's Rhetorical Analysis. Required of all Sophomores in A. B. courses and of Juniors in pre-medical and scientific courses. Four hours.

3. Criticism, Exposition and Argument. English composition. Prescribed for all Sophomores in A. B., pre-medical and scientific courses who have passed in Course 1a or 1b. This course is closely connected with Course 2. Constant practice in writing consists of: (1) exercises based on the text book, written in the class room and outside; and (2) the preparation of six themes accompanied by outlines. Text book: Genung's The Working Principles of Rhetoric. One hour.

3a. English Composition. A course intended for special students or students in engineering courses who have passed in 1a or 1b. This course will be adapted to the needs of class. One hour.

3b. Debate. An elective course treating of the fundamentals of debate, open to Freshmen, Sophomores and specials who desire special work in argumentation. One hour.

4. Argument and Persuasion. Open to all of Junior rank who have passed Courses 2 and 3. This course includes: (1) A study of the principles of argumentation and persuasion, as set forth in the master arguments and orations; (2) the drawing of two briefs from masterpieces of argumentative composition and the analysis of two orations in class; (3) the construction of three arguments, one description or narration, and one paper of oratorical nature, each preceded by a brief; (4) lectures and conferences. Text book: Baker's Specimens of Argumentation. One hour, two credits.

4a. Argumentative Composition. This course consists of (1) the drawing of two briefs from masterpieces of argumentative composition; (2) the study of principles and methods under inductive and deductive arguments; (3) the study of the nature and kinds of evi-

dence; (4) the production of three forensics, each preceded by a brief. Text books: Baker's Principles of Argumentation; Baker's Specimens of Argumentation. A two-hour course, open in the first semester to all of Junior standing who have passed Courses 2 and 3. 4a followed by a supplementary course. Three credits.

4b. Construction of the Oration. This course includes (1) a study of the principles of argumentation and persuasion, as set forth in master orations; (2) the analysis of two orations in class; (3) the construction of two orations or papers of oratorical nature, each preceded by a brief; (4) lectures and conferences. Text books: Same as in Course 4a. A two-hour course for the second semester. Open to all who have passed 4a.

4c. Advanced Composition. Themes. This course is intended for Juniors who do not desire to continue work in argumentation. It is open to Sophomores who show special aptitude in story writing. It includes (1) a study of narration, description; also character, plot and dialogue, as exhibited in the short story; (2) analysis of classic prose in three forms; (3) construction of three papers illustrating these forms. A two-hour course for second semester. Open to those who have passed 1.

4d. Forensics and Debating. Open only to those who have passed Courses 2 and 3 with credit. Course 4d is counted as an equivalent of Courses 4a and 4c or 4e. Two hours.

4e. Exposition. A study of the principles of exposition and of the structure of three modern essays; construction of practical exercises and three essays. Two-hour course the second semester, intended to follow 4a. Prerequisite: At least Junior standing. Not given in 1902-1903.

5. Forensics and Orations. Open only to Seniors who have passed Course 4 or Courses 4a, first semester, and 4b, second semester, with credit. Course 5 consists of (1) the drawing of one brief from a masterpiece of argumentative composition; (2) the analysis of two master orations; (3) lectures, conferences, and criticisms of briefs, forensics and orations; (4) the writing of two forensics and two orations, each preceded by a brief. An elective course, one hour a week. Two credits.

Courses 4 or 4a, first semester, 4b second semester, and 5, must be taken by students intending to compete for Failing and Beekman oration prizes.

6. Journalism. Development and functions of the American news-

paper. Study of the methods of journalism as set forth in a few great papers of our day and country. Practice in various forms of newspaper writing. A two hour course. Prerequisite: At least Junior standing.

7. **English Literary Criticism.** Lectures on the principles of criticism; a survey of literary criticism in England since the sixteenth century; special attention given to the nineteenth century including Wordsworth, Coleridge, Hazlitt, Lamb, Arnold, Pater, Lowell. Assigned readings and reports. Two hours. Not given in 1902-1903.

FOR GRADUATES AND ADVANCED UNDERGRADUATES

8. **Seminar** is the Critical Study and Construction of the **Short Story.** A two-hour session each week. The structure of the short story will be analyzed in comparison with that of the novel and drama. Themes, motives, art in development of character, plot and environment will be discussed. This course will require the construction of a certain number of short stories, with practice in working out details. Open to graduates, Seniors and special students in English who are properly fitted. Three credits.

9. **Seminar in Rhetorical Methods.** Two-hour session each week. This course is intended for graduates who intend to teach English or for teachers of English. Prerequisites are Courses 1, 2 and 3, or equivalents. The aim of this course is two-fold: To discuss important questions in the theory of rhetoric; to outline modern methods of teaching rhetoric and English composition in schools and colleges. Primarily for graduates.

10. **Modern English Grammar.** A course for teachers of English. Open to students who have taken Courses 2 and 3. Two-hour sessions each week. Not offered in 1902-1903.

11. **Seminar in the Theory, History and Practice of Criticism.** This course will consider the critical theories of Plato, Aristotle, Horace, Boileau, Lessing, and also English masterpieces of literary and applied criticism from Sidney to Arnold. Open to graduates. Two-hour sessions each week. Not given in 1902-1903.

12. **Outline History** of the beginning of English Prose. A brief consideration of Caxton, Malory, Tyndale, and a history of the English versions of the Bible to 1611. One hour.

13. **Daily Themes.** Open to a limited number who have passed Course 4 with credit. One hour. Not given in 1902-1903.

EQUIPMENT

This department is very well equipped in English dictionaries and special works for reference in rhetoric, English composition and criticism. It has constant use for latest authorities in the general library.

II. ENGLISH LITERATURE

Assistant Professor Howe.

1. **Outlines of Modern English Literature.** From Edmund Spenser to the present. The aim will be to lead the student, as far as possible, to gain his knowledge of each epoch from first hand reading of selected portions of representative authors, supplemented by lectures and text-book study. Prescribed for all Freshmen except in premedical and scientific courses. In these two courses prescribed for Sophomores. A prerequisite to all advanced courses in English Literature. Three hours. Will be given in first and repeated in second semester. To be preceded or followed by the similar course given by Professor Glen. ASSISTANT PROFESSOR HOWE.

1a. **Supplementary Freshman Course.** For students in Course 1 who are able to devote more than the prescribed time to the subject. Representative works will be read and discussed in class. Permission to take this course must be had from both Professor Carson and Assistant Professor Howe. One hour. Will be given in first and repeated in second semester. ASSISTANT PROFESSOR HOWE.

2a. **Wordsworth.** A study in chronological order of the more important poems, illustrating the development and scope of his genius. Two hours, first semester. ASSISTANT PROFESSOR HOWE.

2b. **Shelley.** A study of the more important works, in their order as written, and elucidated by a study of his life; illustrating the growth of his powers and his significance in the literature. Two hours, first semester. ASSISTANT PROFESSOR HOWE.

3a. **Browning.** Two or three of the larger masterpieces of this

poet will be studied, with a view to give the student facility in reading his poems understandingly, and an idea of his significance in the literature. Two hours, second semester.

ASSISTANT PROFESSOR HOWE.

3b. **William Morris.** A concurrent study of the life and writings (both prose and verse) sufficient to give the student a fair comprehension of the meaning and importance of Morris. Two hours, second semester. ASSISTANT PROFESSOR HOWE.

[Courses 2a, 2b, 3a and 3b, primarily for Sophomores and Juniors, have, besides their immediate object, that of early inducting the student to the proper method of undertaking the study of any author, and of making clear the danger of forming conceptions upon an acquaintance with one work only. They are introductory to Courses 4 and 5.]

4. **The Georgian Poets.** Wordsworth, Coleridge, Southey, Scott, Byron, Shelley, Keats, Hunt, Hood, Landor. Lectures, with collateral reading and reports by the class. Must be preceded by 2a or 2b. Primarily for Juniors and Seniors. Three hours, first semester.

ASSISTANT PROFESSOR HOWE.

5. **The Victorian Poets.** Browning, Barrett Browning, Tennyson, Rossetti, William Morris, Swinburne, Matthew Arnold, DeVere, Yeats, Watson, Phillips. Lectures, with collateral reading and reports by the class. Must be preceded by 3a or 3b. Primarily for Juniors and Seniors. Three hours, second semester.

ASSISTANT PROFESSOR HOWE.

[Students are advised to take 2a and 3a in Sophomore year 2b and 3b in Junior year, following with 4 and 5 in Senior year, these courses forming a distinct and related group of studies.]

6. **From Milton to the Publication of the Lyrical Ballads, 1625 to 1798.** Outlines, (a) of the literature of the Puritan period, with special attention to Milton; (b) of the literature of the Restoration, with special attention to Dryden; (c) of the literature of the first forty years of the eighteenth century, with special attention to Swift, Addison and Pope; (d) of the literature from 1740 to 1798, with special attention to the rise of romanticism. Three hours. Not given in 1902–1903. ASSISTANT PROFESSOR HOWE.

7. **Edmund Spenser.** A study of the Shepherd's Calendar and Faerie Queene complete, with some of the minor poems. Two hours, first or second semester. ASSISTANT PROFESSOR HOWE.

8. Shakespeare. An introductory study, in which about twenty plays, so selected from Dr. Furnisall's classification as to indicate the growth of Shakespeare's mind and development of his art, will be read rapidly to give a foundation for later detailed studies. Three hours throughout the year. ASSISTANT PROFESSOR HOWE.

9. The Contemporaries of Shakespeare. Chiefly the Elizabethan dramatists, with some attention to contemporary pamphlet literature. Recommended to students in history, as especial attention will be paid to the life and manners of the epoch as here depicted. For Juniors and Seniors. Two hours throughout the year.
ASSISTANT PROFESSOR HOWE.

[Students are recommended to group 7, 8 and 9 together, taking 7 first and 8 and 9 at the same time or in successive years.]

10. The English Novel. From the Morte D'Arthur to the present, including a study (a) of the Elizabethan novelists, Greene, Nash, etc.; (b) of the Augustan novelists, Richardson, Fielding, etc.; (c) of the Georgian novelists, Scott, Miss Austen, etc.; and (d) of the Victorian novelists, especially Dickens, Thackeray and George Eliot. Lectures, with collateral reading, and reports by the class. For Seniors and graduates. Three hours throughout the year.
ASSISTANT PROFESSOR HOWE.

11. English Prose Writers (not novelists) of the nineteenth century, DeQuincey, Macaulay, Carlyle, Landor, Newman, Matthew Arnold, Ruskin. For Juniors and Seniors. Two hours throughout the year. ASSISTANT PROFESSOR HOWE.

[Students are recommended to take Course 11 with Courses 4 and 5, or, less desirably, with Course 10.]

12. American Literature. This course gives an outline of American literary history and the reading and discussion of important works in prose and verse. It is carried on through text book, Pancoast's American Literature. Authors read: Franklin, Cooper, Irving, Poe, Webster, Bryant, Longfellow, Emerson, Hawthorne, Holmes, Lowell, Whittier, Whitman, Lanier. First semester, to 1830. Second semester, 1830 to present time. Two hours throughout the year. PROFESSOR CARSON.

13. Seminar. English Blank Verse. Elizabethan, Miltonic and recent. Two hour sessions each week. For graduates and advanced undergraduates. ASSISTANT PROFESSOR HOWE.

14. Seminar. English Narrative Poetry from Marlow to Morris.

Two hour session each week. For graduates and advanced undergraduates. ASSISTANT PROFESSOR HOWE.

15. Seminar in Versification. Critical study of a few verse poems which are dominant in English poetry, with practice in metrical composition. Two hour session each week. Open to Juniors, seniors, and graduate students. ASSISTANT PROFESSOR HOWE.

16. Teachers' Training Course in English Literature. Principles, aims, methods and means to be used in the conduct of literary study. Lectures. One hour, second semester.

ASSISTANT PROFESSOR HOWE.

EQUIPMENT

The English library contains the masterpieces of the most valuable authors in English and American literature and is especially well equipped in a few selected periods. Nearly five thousand volumes were added to the University library in 1901 by purchase, gift and exchange, and the equipment of the department of English is therefore greatly strengthened.

III. ENGLISH LANGUAGE AND EARLY ENGLISH LITERATURE

Professor Glen

Courses 2, 7a and 7b are primarily designed for undergraduates seeking the A. B. degree, but these courses must be taken with other specified courses for any advanced degree in English. The remaining courses include purely graduate courses, and those to which properly fitted undergraduates may be admitted, as specified below.

As all of these courses cannot at present be given in any one year, those will be open for which there seems to be the greatest demand. Alternate courses will be given in alternate years.

1*. General History of English Literature. History of Old and Middle English Literature. A course in the beginnings of Literature in English. Recitations, lectures, and reports. Prescribed in Freshman year for all candidates for A. B. and B. S. degrees, and a prerequisite for all other college courses in English Literature. To be followed by a similar course in second semester by Assistant Professor Howe. Each semester, three hours. PROFESSOR GLEN.

* This is repeated each semester.

2. Anglo-Saxon. Anglo-Saxon grammar and translation of select passages of prose and poetry. The relation of Anglo-Saxon to the cognate continental languages will be carefully studied, and similarities traced. A knowledge of German will be found extremely helpful. The elementary knowledge of Anglo-Saxon will be valuable to students of English history and English constitutional law. Open to students who have requisite language preparation. Required for advanced degrees in English. Required for advanced degrees in German. Three hours.

3. Anglo-Saxon. Beowulf, a textual and critical study of the great epic. Speculations concerning composition and authorship, historical value and literary merit. Christian elements and mythical elements. Special emphasis will be laid upon the phases of Anglo-Saxon life and spirit that the poem may express. Required for advanced degrees in English. May be taken by undergraduates. Three hours.

4. English Literature, from Norman Conquest to Chaucer. Results of conquest. Religious poetry, English folk poetry. "Art, lyric and epic." Anglo-Norman poetry. Layamon, legend, tale and tract. Later religious poetry, Langland, Gower and Wiclif. Open to graduate students and undergraduates who may have taken prerequisite courses. Required for advanced degrees in English. Two hours.

5. Chaucer. Biography. Textual and critical studies in the Canterbury Tales and in minor poems. The seminary method is used when conditions permit. Topics assigned for individual study and reports, including influences of French and Italian predecessors, sources of poems, group classifications, origins, contents and relations between different poems. Open to undergraduates who have completed Course 3. Required for advanced degrees in English. Three hours.

6. English Literature from Chaucer to Spenser. Occleve, Lydgate. Early religious drama, miracle, mystery, and morality plays. Humanistic influences. Scotish imitators of Chaucer. Wyatt, Surrey, Skelton. Undergraduates not admitted without prerequisite Courses 1, 3, 4, 7a, 7b. Required for advanced degree in English.

7a. History of the English Language. A general lecture course in the growth and development of the language, including discussions of different language families, characteristics, family and group or branch connection of English. Consonant shifts. Teutonic group characteristics. Native and foreign linguistic elements. Formative period. Creative period. Two hours, first semester.

7b. English Phonology. Principles of phonetics. Development of English vowel and consonant sounds. Two hours, second semester.

Half courses 7a and 7b are companion courses for 2, and are prerequisite for courses 3, 4, 5, 6, 8, 9. Required for advanced degrees in English.

FOR GRADUATES AND ADVANCED UNDERGRADUATES

8. Anglo-Saxon. Readings from Cynewulf, signed poems and those attributed to him. Alfred, Saxon Chronicles, Aelfric, alliterative and prose homilies and translations. Required of students taking major work for advanced degrees in this department. May be elected by any who have completed the preceding courses. Not open to undergraduates. Three hours.

9. The Metrical Romances of Early English Literature. Form and contents. Early materials. Early significance. Origins. Translations of French Romances. Two hours. Open to graduate students only. Required for advanced degrees in English.

10a. History of English Epic and Lyric Poetry. This course is intended to serve as an introduction to the field of epic and lyric poetry. With Course 10b, it aims to cover the three great lines of development in English verse. A knowledge of Anglo-Saxon and Middle English is prerequisite for this course. Strictly graduate course. First semester, three hours.

10b. History of English Drama. This course will be introduced by a survey of the greater epochs of the drama in literary history, after which it will proceed to the study of the beginnings and subsequent development of the drama in English. Graduate course, second semester. Three hours.

PUBLIC SPEAKING

Professor Glen.

There are five occasions for the delivery of public debates and orations scheduled for each year. This includes the competition for the Failing and Beekman prizes. In order to be eligible to enter this competition, a student must have completed Course 3 and one semester of Course 4. Students will not be allowed to enter Courses

3 and 4, however, unless they have done satisfactory work in Courses 1 and 2 in this University, or equivalent work elsewhere.

1. **Regular Freshman Course.** Fundamentals, articulation, emphasis, inflection and elementary work in vocalization and gesture. One hour.

2. **Sophomore Orations** Open to all who have taken 1. A more detailed study of interpretation and expression. Advanced work in vocalization and gesture. Public work. One hour.

3. **Formal Oral Debate.** First semester. A study of the forms of debate. Private and public debates. Continuation of study of expression. One hour.

Second semester. Introduction to the study of oratorical forms and delivery, characteristics of oratorical style. Divisions of oratorical style, methods of cultivation of best style. What to avoid in oratory. Continuation of work in vocalization. Public Junior orations. One hour.

4. **Famous Orations and Orators.** Private rehearsals. Class drill. Competition for Failing and Beekman prizes. First semester, American orators. Second semester, British orators. One hour.

5. **Interpretation of Drama.** The aims of this course are to give the student closer acquaintance with the physical and psychological elements of expression and to furnish a "laboratory" for the analysis of much of the best in literature. Both classic and modern drama will be studied, details of interpretation carefully worked out, and at least one play publicly presented. One hour.

This course is open to students registered in any course in elocution or oratory in this University, provided the work in that course shall have been of a satisfactory character.

EQUIPMENT

The library facilities for study in this department have been sufficient thus far for the general needs of the work. A select collection of complete editions by the best known and most scholarly editors of English literary productions is being secured. The library is quite full of material for the study of old lyrics, and a beginning has been made in collecting material for the study of sources, such as "Morte D'Arthur," "Orlando Furioso," "Amadis de Gaul." The literature

of criticism and philology is represented by such names as Ten Brink, Brooke, Goose, Earle, Sweet, Skeat, Whitney, Bright, Bosworth, Toller, Kluge, Cook, Emerson and Mayhew. A nearly complete set of the publications of the Scottish Text Society and a complete set of Early English Text Society publications have been added recently.

GEOLOGY

Professor Condon

1. General Geology. A general course in physical, stratigraphical and historical geology, with laboratory work in rock collections with type fossils illustrating the geology of Oregon and the United States. This course is a foundation for all of the subsequent work of the department, and the work will differentiate from this course as a basis along the following lines: (Three hours.)

A

2. Geological Examinations and Surveys. A discussion of the methods of systematically recording and interpreting geological phenomena. This will be followed by study of the scope of geological surveys and history, and results of such surveys.

The main part of the course will be taken in connection with the courses in Surveying, in Civil Engineering, and will include the representation of the results of surveys in (1) surface maps; (2) contour maps; (3) relief maps in clay. Two hours.

B

3. Mineralogy. A course in the outlines of crystalography and descriptive and determinate mineralogy. (See Chemistry.) Two hours.

4. Optical Mineralogy. A course to make students familiar with the principles, apparatus and characteristics of minerals in thin sections.

5. Petrography. A course in microscopic study of rocks.

6. Petrology. Study of the origin, mineralogical composition and microscopic structure of crystalline rocks; and of metamorphism.

7. Economic Geology. A study of the formation and general

features of ore deposits, and a more detailed study of ore deposits of iron, copper, lead, zinc, silver, gold and lesser metals, with special reference to North America and Oregon. Also a general study of the distribution and occurrence of coal, petroleum, natural gas, asphalt, marbles and building stones, phosphates, water supply, clays, salines, etc. One and a half hours.

8. Economic Geology. An advanced course with attention confined to ores of iron, copper, gold, silver, lead, zinc, and lesser metals in Oregon and surrounding states. Two hours.

9. Economic Geology. A companion course to Course 8, dealing with coal, petroleum, natural gas, asphalt, marbles and building stones, phosphates, water supply, clay, salines, etc., etc., in Oregon and surrounding states. Courses 8 and 9 alternate. Two hours.

10. Palaeontology. The study of organically formed and fossiliferous rocks, typical fossils of all ages, with special attention to those occurring in Oregon. Lectures and laboratory work. Two hours.

11. Blowpipe Analysis. Tests for elements and the qualitative analysis of minerals, alloys and slags. (See Chemistry.) One and a half hours.

COURSES FOR GRADUATES AND ADVANCED UNDERGRADUATES

Graduate courses will be outlined in geology as called for, and the credits assigned. In addition, courses 2, 5, 6, 8, 9 and 10 are open to graduate students.

EQUIPMENT

In the Department of Geology, the State University of Oregon has a fine outfit of illustrative material. This is contained in two cabinets. One of rocks and minerals, part of which was presented to the University by the United States Geological Survey; the other part being the rocks and minerals of Professor Condon's collection.

The other cabinet is especially rich in fossil remains and represents the fruits of over forty years of continued research in the mountains of Oregon for materials to illustrate their history. These are, therefore, strictly characteristic of Oregon's own geological record.

These materials more than fill twenty large glass cases, whose under spaces are crowded with over two hundred drawers also filled with illustrative geological materials, arranged to accommodate the daily classes of the geological course. This undisplayed material would fill thirty or forty more cases, and requires a much larger museum.

The department has also a valuable archaeological collection, and will make a collection of building stones, fire clays, and salines in connection with the proposed University geological survey contemplated in the course of instruction in geology.

GREEK LANGUAGE AND LITERATURE

Professor Straub

1. Elementary Greek. Gleason and Atherton's First Greek Book. Fall semester, five times each week.

2. Xenophon's Anabasis. (Harper & Wallace) Book I; Goodwin's Greek Grammar. Spring semester. Five times each week.

(Courses 1 and 2 include a thorough drill in Greek declensions and conjugations.)

3a. Anabasis. Books II, III, IV. Critical study of the prepositions (Adams'); Goodwin's Greek Grammar. Fall semester. Four times each week.

3b. Homer's Iliad. Books I to IV, inclusive. Jebb's Homer; Mahaffy's Old Greek Life. Spring semester. Four times each week.

(Courses 3 and 4 include a thorough drill in Greek syntax, with daily translations of simple English sentences into Greek,)

4a. New Testament Greek. The four Gospels. Fall semester, four times weekly.

4b. New Testament Greek. Acts to Revelations, inclusive. Spring semester, four times weekly.

(Courses 5 and 4 are intended for divinity students, and are elective to other Greek students. Prerequisite courses, 1 to 4.)

5a. Xenophon's Memorabilia. Demosthenes, Philippics. Fall semester, four times weekly.

5b. Lysias Orations. (Morgan). Selections from Herodotus. Spring semester, four times each week.

6a. Medea of Turipides. Aeschylus' Prometheus; Study of the Attic Theater. Fall semester, three times each week.

6b Plato's Apology and Crito; Sophocles' Antigone; Greek Literature (Morris). Spring semester, three times weekly.

7a Aristophanes' Clouds; Sedgwick's Greek Prose Composition. Fall semester, three times each week.

7b Demosthenes' De Corona. Bredif's Life of Demosthenes; Greek prose composition. Spring semester. three times each week.

8. Greek Mythology. Text-books, reading and informal lectures. Once a week during the year. No Greek required for this course. Open to all students.

FOR GRADUATES AND ADVANCED UNDERGRADUATES.

9. Modern Greek Grammar. Fall semester, three times a week.

10. Modern Greek Literature, studied and compared with Classic Greek. Spring semester, three times a week.

11a. Pindar's Odes and Fragments; Thucydides, Books IV to VI. Fall semester, two times a week.

11b. Selections From Aristotle. Spring semester, two times a week.

12. Homer's Iliad. Books VI to XXIV, inclusive, read with a view to the study of the civilization and customs of the Homeric Tribes. Once each week during the year.

13a. Greek Epigraphy. Text book: Sobert's. Fall semester. Once each week.

13b. Greek Inscription. Text book: Hicks' Manual of Greek Historical Inscriptions. Spring semester. Once each week.

Courses 6b, 7a and 8b may also be taken by graduate students with the consent of the instructor.

EQUIPMENT

The department of Greek has a number of Kiepert's large wall maps, i. e., Greece, Asia Minor, Persia, etc.

The Classical Library contains, among other books, all of Dr. Smith's dictionaries of Greek and Roman Antiquities, Biography, Mythology, Geography, etc.; also Mahaffy's complete works, and works covering Ancient Sculpture; Painting, History, Greek Culture, Social Life, Ancient Classical Literature, the Attic Theater, Growth of the Greek Constitution, of the Drama, Development of Oratory, etc. Large additions to the above were made during the year 1901-1902.

HISTORY

Assistant Professor Schafer
Professor Young

The courses in history are correlated as far as possible with those in English Literature and Economics. They are arranged in three groups. The introductory courses, 1 to 5, are general courses planned to lay the foundation for all future work. They are not open to graduate students. Such students must have had them or equivalents before undertaking the advanced work.

The advanced courses are intended to offer, upon the basis of the introductory work, an opportunity for a somewhat detailed study of more limited periods in European and American history.

The graduate courses demand considerable training and some power of original research work.

INTRODUCTORY COURSES

1. Greek and Roman History. A general course down to the year 800 A. D. Five hours. Two hours during first semester and five hours first half of second semester.

2. English History. A general course in political history, running parallel with and correlating with Course 1, Group II in Economics. Three hours, second half of second semester.

Courses 1 and 2 (together with Course 1, Group II in Economics), constitutes the first year's college work in history. They

are required of all Freshmen in the Civic Historical, General Classical and General Literary groups.

3. Mediaeval History. A general course in the history of Mediæval Europe to the end of the fifteenth century. Three hours, first semester.

4. Modern History. A general course in history of Modern Europe, from about 1500 to the present time. Three hours, second semester.

Courses 3 and 4 constitute the second year's work in history. Elective.

5. American History. A general survey of political history in two parts; (a) the colonial period, to 1789; (b) the constitutional period, from 1789 to the end of the nineteenth century. Three hours for one year.

ADVANCED COURSES

6. English Constitutional History. For students who intend to study law or teach English history, and who have had a general course in English history. Three hours for one year.

7. The English Colonial System. An intensive study of those phases of English history since the Puritan Revolution which exhibit the growth of the colonial system, and the methods of its administration. Three hours a week for one year.

8. Oregon History. A intensive study of the history and institutions of Oregon. Lectures, collateral reading and source work. Two credits.

This group of advanced courses is intended for Juniors and Seniors who have had the introductory courses or their equivalents, and for graduate students of insufficient preparation in history. One or more of them will be given each year.

GRADUATE COURSES

9. Methods of Research and Criticism. This course will include the elements of bibliography, studied concretely as well as theoretically;

and the principles of historical Criticism. Practice in research will be insisted upon and an original historical essay of satisfactory character required as a condition of the completion of the course. Two credits.

10. Teaching of History. Lectures by the instructor on teaching history, with especial reference to secondary schools. One hour, second semester.

11. Seminary in American History. The course will include: (a) lectures on westward expansion from 1763 to 1898; (b) a study from the sources of selected topics in the history of the Old Northwest, (the states of Ohio, Indiana, Illinois, Michigan, and Wisconsin); (c) a study from the sources of selected topics in the history of the Pacific Coast states. Three hours for one year.

All of the courses in this group are open to Seniors of exceptionally good preparation, as well as to graduate students.

EQUIPMENT

The equipment in history is already considerable and is being added to as rapidly as means will permit. The library contains many of the standard general histories and histories of special periods. In the way of primary sources the University is especially favored in having at hand a considerable part of the documents and manuscripts of the Oregon Historical Society, which form an exceedingly valuable body of materials for research work in history. This material is being used by our advanced students in the production of monographs on various subjects in Oregon history.

The library is also adding to its stock of historical sources especially in the line of later English and American history. It now possesses the colonial records and archives of several of the original states, and has perhaps the most complete collection of materials on the Old Northwestern states to be found on the Pacific Coast. These include the historical society publications of Ohio, Indiana, Illinois, Michigan and Wisconsin, and a large part of the state documents of the same states. Efforts are now being made to complete our files of the publications of the Pacific Coast states, of which a large part are already at hand.

LATIN LANGUAGE AND LITERATURE

Professor.....
Assistant Professor Rice

1. Roman History. (a) The Legendary Period; Livy, Books I and II; (b) the Second Punic War; Livy, Books XXI and XXII.

2. Roman Comedy. (a) The Plays of Terence, Phormio and Andria; (b) the Plays of Terence, Adelphoe and Phormio. Four hours per week. Three hours.

Courses 1 and 2 are to be taken in succession, occupying respectively the first and second semesters of a college year, and are designed primarily for Freshmen or those who enter with credits covering four years of academic or high-school Latin. Both 1 and 2 provide in turn subdivisions (a) and (b), which are offered either in alternate years or at the discretion of the instructor, both divisions being identical in value and subject, differing only in choice of books in Livy and one play in Terence. The regular text preparation in Livy and Terence is supplemented by sight reading in both authors or in selections from Ennius, Horace, Catallus, Ovid, etc. One hour a week is given to Latin composition and the study of idioms of classic prose. Lectures to be given at stated intervals during the year are provided upon such cognate themes as "The Regal Period of Rome," "Rome and Carthage," "Livy," "Hannibal," "Terence," "The Roman Theater," "The Roman Historians," and "The Roman Lyric Poets."

Text books: Livy, Books I and II; Greenough (Ginn), Books I, XXI and XXII Lord (Sanborn); Terence, Phormio, Elmer (Sanborn); Adelphoe, Cowle (Sanborn); Andria, West (American Book Co.); Selections from Latin Poets, with brief notes (Harvard Publishing Company); Latin Composition for College Use, Miller (Sanborn).

3. Tacitus. (a) The Germania and Agricola; (b) selections from the Annals; (c) selections from the Histories.

4. Horace. (a) The Odes and Epodes; (b) the Satires and Epistles. Four hours per week. Three hours.

Courses 3 and 4 combined form one year's work, designed to supplement Courses 1 and 2. The first semester is devoted to Tacitus, subdivisions offering a variety in the choice of works to be read. Course 3 (b) or (c) will introduce the student to interesting epochs in Roman history, whereas (a) provides the fascinating story of early

Roman Britain and tribal Germany. Course 4 occupies the second semester, with Horace, (a) providing a study of lyric Latin in the Odes and Epodes, or (b) offering a similar opportunity in Roman satire and the Satires and Epistles. As in 1 and 2 the regular text work will be supplemented by drill in composition, one hour each week.

Text books: Tacitus, Annals, Books I-VI, Allen (Ginn); Histories, Books I and II, or III-V, Godley (Macmillan); Germania and Agricola, Hopkins (Sanborn). Horace, Odes and Epodes, Smith (Ginn); Satires and Epistles, Greenough (Ginn). Handbook of Latin Writing, Preble and Parker (Ginn).

5. Selections from the Epigrams of Martial and Satires of Juvenal.

6. Selections from the Letters of Pliny and Lives of Suetonis. Three hours per week.

Courses 5 and 6, designed to be taken in successive semesters, continue the series begun by the four courses preceding. They cover an interesting epoch in the literature of the Empire, and are especially valuable for their reference to Roman society of the Decline. A rapid succession of four different authors, each a master in a distinct province of letters, provides a pleasing variety of topic and style.

Text books: Martial, Stephenson's Selections, (Macmillan); Juvenal, Duff (Macmillan); Pliny, Westcott's (Allyn); Suetonius, Books I and II, Cick (Holt).

7. Selections from Lucretius.

8. The Plays of Plautus. Three hours per week.

Courses 7 and 8 together correspond primarily to the Senior year. Lucretius occupies the first semester and opens an attractive field in philosophy in selections from his De Rerum Natura. Plautus follows in the second semester, supplementing the study of Terence in the Freshman year with that of the Captivi, Trinummus and Pseudolus, and an extended analysis of the Latin drama.

Text books: Lucretius, Books I, II, III; Lee (Macmillan); Plautus, Captivi and Trinummus, Morris (Ginn), Pseudolus, Morris (Allyn).

COURSES FOR GRADUATES AND ADVANCED UNDERGRADUATES

9. Catullus and the Elegiac Poets. Three hours per week through half year.

This course continues through the first semester only, one-half of the time given to the study of Catullus, the remainder to the elegies of Tibullus, Propertius and Ovid.

Text-books: Catullus, Merrill (Ginn); Roemische Elegiker, Schulzer (Weidmann, Berlin).

10. Cicero's Letters. Three hours per week through half year.

11. Private Life of the Romans. Three hours per week.

Course 11 consists entirely of lectures, continuing through the entire year. The aim of the course is to bring to the aid of the numerous reading courses the knowledge gained by a survey of the private institutions, customs, etc., of the people themselves. Two theses will be required of each student upon some special topic assigned by the instructor. It will be found a very helpful course, indispensable to the finished Latin student.

12. History of Roman Satire. Three hours per week through half year.

13. History of Latin Literature. Prose. Three hours per week. Three hours.

Course 13 gives in lectures a survey of Latin prose from the earliest times to its decline. Suitable selections are designated by the instructor to be read in private by the students. Course 13 is given in alternate years with 14.

MATHEMATICS

Professor.....
Mr. Black.

1. Elementary and Advanced Algebra. Five times a week for three semesters. Text-book completed, including all of the examples and problems.

2. Plane and Solid Geometry. Five times a week for three semes-

ters. Text-book: Wentworth's, edition for 1899, completed, including all of the exercises.

3. Higher Algebra. This is an elective course intended for students who wish to make rapid and easy progress in their subsequent mathematical studies. The subjects included are: Variation, inequalities, surds and imaginary numbers; the binomial theorem for any exponent, the theory of exponents, including fractional exponents and incommensurable powers; the theory of quadratic equations, the three progressions, theory of limits, indeterminant equations, interest and annuities; permutations, combinations, and probabilities; convergency and divergency of series, undetermined coefficients, partial fractions, exponential and logarithmic series, logarithmic computations, summation of series, and elements of determinants. Problem-solving and theory have equal weight. Text book: .... supplemented by the instructor. Three times a week for one year.

4. Analytical Geometry and Trigonometry. This is an elementary course. Text books: Nichol's Analytical Geometry, and Wentworth's Trigonometry. Five times a week for one year. Required of Freshmen in General Scientific Group, and all regular courses in the College of Science and Engineering.

5. Differential and Integral Calculus. This is an elementary course and requires Course 4, or preferably Courses 3 and 4.

This course includes the development of the fundamental principle and formulas of the differential and integral calculus; application to tangents and normals; to plane curves; maxima and minima values; indeterminate forms; expansion of functions in series; curvature, evolutes, and singularities of curves; length of curves, areas, surfaces, volumes, Taylor's theorems, differentials of several independent variables; the integral as the limit of a sum, and the application of infinitesimals to geometrical problems. The student is required to solve a large number of problems. Problem-solving has equal weight with theory. Text book: Osborne, completed. Five times a week for one year. Required Sophomore year in Engineering.

6. Differential Equations. Requires Courses 4 and 5, or, preferably, Courses 3, 4 and 5. It is an elementary course and includes the general theory of linear differential equations, with particular reference to differential equations of the second order, solutions in series, and special study of the hypergeometric function; Riccate's equation, Legendre's equation and Besselian functions. Much stress is laid on the solving of problems. Text book: Murray's Differential Equa-

tions, supplemented by Johnson's Differential Equations. Five times a week for first semester Junior year Engineering.

7. **Plane and Solid Analytic Geometry.** Requires Course 4, or, preferably, Courses 3, 4 and 5. It is an advanced course and includes a discussion of the general equation of the second degree, and some special examples in higher loci, quadratic surfaces, conicoids referred to their axes, generating lines, plane sections and systems, and foci of conicoids; tangential equations, reciprocation, confocal and concyclic conicoids. Text book: C. Smith, supplemented by instructor. Three times a week for one year.

8. **Theory of Equations.** This is an elementary course, and an introduction to the theory of functions. It includes the fundamental theorems of determinants, their applications and some special forms, and the principal elementary theorems concerning algebraic and numerical equations. Barton's text book will be used. Second semester, three times a week.

9. **Theory of Equations and Determinants.** This is an advanced course, and presupposes a good knowledge of algebra and a working knowledge of plane trigonometry and differential calculus. The following subjects are some of the more important that are taken up: The differential theory of determinants, with some of their important applications; complex numbers aud their geometric representation; the general properties of equations, including a treatment of multiple roots and Sturm's theorem; the cubic and biquadratic equations; reciprocal and binomial equations; homogeneous equations; and graphical methods. Based on Burnside and Phanton's Theory of Equations. Three times a week for one year.

10. **Analytical Mechanics.** An elementary course consisting of a mathematical treatment of the principles of statics and kinematics; conditions of equilibrium, friction, rectilinear and curvilinear motion, constrained motion, motion of a system of rigid bodies in space. Four times a week for one year.

GRADUATE COURSES

11. **Differential and Integral Calculus.** The student who takes this course must have a thorough knowledge of the elements of the differential and integral calculus. This subject will be a continuation of Course 5 and will require Course 3. It will include the application of the differential calculus to a maxima and minima of functions of

three and more independent variables, tracing curves, curved surfaces and curvature, curves in space, and the calculus of operation; the various methods of integration; multiple integrals; infinite series: elliptic integrals; gamma-functions and other allied integrals; Cauhy's integral; and series of Taylor and McLaurin. Throughout the course, constant application of the principles studied will be made to problems in geometry and applied mathematics.

This course is based on Williamson's, Price's and Todhunter's Calculus. Four times a week for one year.

Other Graduate Courses. Courses will be provided for graduates and others who have had sufficient training to take them, in quaternions and vector analysis, theory of substitutions, theory of groups, algebraic curves and surfaces, theory of functions and modern analytical geometry.

EQUIPMENT

The department has made a beginning on a systematic collection of Brill's models to aid in the presentation of the more difficult subjects. The collection includes:

Plaster models of ellipsoids, hyperboloids and paraboloids with geodetic lines and lines of curvature; also with umbilic, circular and principal sections; ellipsoid, hyperbolic paraboloid, and hyperboloid of one and two sheets with ruled surface; surface of revolution of the tractrix, with geodetic lines and principal curves of tangency; wire and thread models, and skeleton frames to illustrate the different positions of the hyperboloid, its ruled surface and generating lines of conicoids. Also a good spherical blackboard three feet in diameter, and blackboard apparatus to aid the student in the work of geometrical constructions, and a creditable collection of models and geometrical drawings for use in illustrating the more difficult propositions and theorems in Euclidian geometry, constructed by students of the department in the workshop.

MECHANICAL ENGINEERING

Mr. Dearborn.

1. Steam Engine and Boiler. A course designed for civil engineers,

developed on the practical side with a minimum of theory. The aim of the course is to acquaint the student sufficiently with the practical workings of the steam engine and boiler to enable him to judge in a given case whether or not steam power may be preferable to some other power, and to make a rational selection for specified purposes. Three hours, second semester, Senior year.

2. Engineering Power of Plants. Steam Engine and Boiler. Steam engines as to mechanism; rotary engines, single-acting engines, condensing, compound and multiple-expansion engines; test, repair, construction, and typical forms of boilers. Three hours for one semester.

3. Machine Design and Specialized Engineering Drawing. Topographical and geological charts and maps, working and isometric drawing of machinery, furnaces and structural work. Tracing and blueprinting and shop drawings. Three hours, first semester, Junior.

4. Management and Test of Boilers. Laboratory and power plant practice.

5. Shop Work. Use of the ordinary tools for wood work; practice in making joints required in framing wooden structures, such as mill buildings, bridges, etc.; work in wood turning at the lathe; making patterns for moulding. Four hours, both semesters, Freshman year.

6. Shop Work. Bench work in iron, steel and brass, with file and chisel; metal turning at the lathe, drilling and screw cutting; practice in planing metals at the large planing machine; work at the forge in drawing, upsetting, welding, tool making and tempering. Four hours, both semesters, Sophomore year.

EQUIPMENT

The University machine shop occupies the second floor of the Hall of Engineering. Two steam engines furnish the necessary power. One an eighteen-horse balanced valve, high speed engine, supplies the power for the electric light plant; the other, a ten-horse power engine, runs the machinery of the shop. The object of the machine shop is, in part, to supply laboratory facilities to the students of the various engineering departments. With this in view, it has been equipped with various forms of suitable machinery, such as lathes for both iron and wood work, drill presses, one large planer for iron, saw tables, one forge, a set of black-

smith's tools, a set of plumber's tools, several sets of taps and dies, and a good assortment of machinist's and carpenter's tools. As soon students have acquired sufficient skill in the use of tools and the manipulation of machines, each one is entrusted with the construction of some valuable piece of apparatus for the University cabinets. In this way several hundred dollars worth of finely finished apparatus has already been added to the cabinet of the physical department at merely the cost of the material.

The machinery of the electric light plant occupies the north end of the first floor of the Hall of Engineering. The equipment consists of two dynamos and auxiliaries. The larger dynamo is a 9-kilowatt, quadripolar, compound-wound machine, and is used mainly to furnish the current for the University electric light system. The smaller one is a 4-kilowatt, bipolar, shunt-wound machine and is used to supply testing facilities to the students of the electrical engineering course. The auxiliaries are of the nature of the volt-meters, ammeters, watt-meters, resistance boxes, etc. The power is supplied by one of the engines of the shop. The system of electrical distribution is the parallel kind and contains about two hundred high efficiency Edison incandescent lamps and a number of arc lamps.

The University operates its own water plant. This is located in the Hall of Engineering, and is connected by pipes with two large tanks in the towers of Deady Hall, the tanks serving as reservoirs. The plant has a capacity of fifty thousand gallons a day. The operation of the plant is largely entrusted to students of engineering courses. In this way it adds materially to the laboratory facilities of the University.

MINERALOGY

(See Geology.)

MINES AND MINING

Professor .....

Mr. Stafford

1. **Ore Dressing and Milling.** General principles of dressing, cleansing; milling of gold, silver and other ores. Description of typical dressing works. Three hours, first semester.

2. **Excavation and Tunneling.** Excavation of earth, tools and

methods; support of excavations; quicksands; hauling of excavated material; explosion and blasting. Tunnels and their drainage and location. Three hours, second semester.

3. Boring and Shaft Sinking, Exploration, Development and Mine Working. Boring methods and appliances for shallow and deep boring. Systems of boring; shaft sinking; mineral deposits, characteristic of beds, veins, etc. Surveying of deposits, maps, outcrops; coal mining; vein mining, etc. Three hours, first semester.

4. Mine Engineering. Methods and machinery, underground haulage, surface haulage and transportation, drainage, mine waters and their control, dams, ventilation and mine gases, fire damp explosions. Three hours, second semester.

EQUIPMENT

(See Chemistry and Engineering.)

MODERN LANGUAGE DEPARTMENT

Professor Schmidt

Assistant Professor Rice

The aim of the instruction in the Modern Language Department is primarily to enable students to use modern German, French or Spanish with facility in reading, writing, and, as far as practicable, in speaking, and to acquaint them with the masterpieces in the respective literatures.

Opportunity is also given for graduate courses in Germanic and Romanic languages. These are intended especially for students who desire to make the teaching of these languages their profession, or who expect to take an advanced degree in them. Careful attention is given to the linguistic as well as to the literary training of the student, aiming at a comprehensive insight into the historical growth of the Germanic and Romanic languages and literature. No credit is given for less than two years' work in French or German.

GERMANIC LANGUAGES AND LITERATURE

1. Elementary German. The elementary course comprises: Joynes-

Meissner's German Grammar; German composition; translation of easy prose and poetry. Special attention is paid to systematic training in pronunciation. The reading of about 100 pages of graduated texts from a reader is required. Huss's German Reader is used. In addition to this, one or two of the following selections will be read: Storm's Immensee; Volkman's Kline Geschichten; Maerchen und Erzaehlungen; Seidel's Maerchen; Zschokkee's Der Zerbrochene Krug. German conversation. Five hours a week throughout the year, 9 a. m.

2. Advanced German. During the second year the work comprises advanced German Grammar and Composition, Syntax. German conversation (based upon Vos's Material or some other method) throughout the year. Material to be read is selected from the following list: Heyse's L'Arrabbiatta; Das Maedchen von Trippi; Baumbach's Die Nonna; Wildenbruch's Das edle Blut; Hillern's Hoeher als die Kirche; Seidel's Leberecht Huehnchen; Hauff's Das Kalte Herz; Leander's Traeumerein; Freitag's Die Journalisten; Lessing's Minna von Barnhelm; Schiller's Wilhelm Tell; Goethe Hermann und Dorothea. The class is expected to read two or three stories and two or three plays during the year. Four hours a week throughout the year, 10 a. m.

3. Goethe, Schiller and Lessing. (a) Goethe's Egmont; Torquato Tasso; Iphigenie auf Tauris. (b) Schiller's Maria Stuart; Jungfrau von Orleans; Wallenstein. (c) Lessing's Minna von Barnhelm; Emilia Galotti; Nathan der Weise. Writing of essays in German; German conversation. Practice in writing German is afforded by means of dictation or similar exercises. Three hours a week throughout the year, 11 a. m.

4. German Fiction. During the year some of the following works will be read: Ebner-Eschenbach's Die Freiherren von Gemperlein, Keller's Dietegen; or Kleider Machen Leute; Rich's Novellen, for example, Burg Neideck, Der Fluch der Schoenheit, Der stumme Ratsherr, Das Spielmannskind, Scheffel's Ekkehard, Wildenbruch's Der Letzte, Dahn's Sigwalt und Sigridh, Meyer's Gustav Adolph's Page, Sudermann's Der Katzensteg. Three hours a week throughout the year.

5. Modern German Drama. The following dramas will be read: Wildenbruch's Harold, Hauptmann's Die versunkene Glocke, Sudermann's Johannes, Fulda's Der Talisman. Three hours a week throughout the year.

Course 4 alternates with 5 and will be given in 1902-1903.

6. German Poetry. Goethe's poems; Shiller's ballads; Uhland's poems; White's Heine's poems; Klenze's Deutsche Gedichte; Hatfield's German Lyrics and Ballads, or Kluge's Auswahl deutscher Gedichte will be used as text-book. One hour a week throughout the year.

7. Goethe's Faust. Part I, with commentary. Two hours a week during one semester. One credit.

8. Heine's Prose. Die Harzreise; Die Romantische Schule and other selections will be read. Two hours a week during one semester. One credit.

9a. Historical German. This course consists of the rapid translation of modern historical and economic German. It is especially designed for those students who wish to acquire a sufficient knowledge of the language to enable them to read German books on history, philosophy, etc. The matter to be read is selected from such works as Riehl's Kulturgeschichtliche Novellen; von Sybel's Kleine historische Schriften; Freytag's Bilder aus der deutechen Vergangenheit; Seiler, Die Heimat der Indogermanen, Schiller's Geschichte des dreissigjaehrigen Krieges, etc. Two hours a week during one semester. One credit.

9b. Scientific German. This course is recommended to students who are taking or who plan to take special courses in Natural Science or in Medicine. Gore's or Dippold's German Science Reader is used as an introduction, and is followed by monographs on various subjects, in order to give the student as large a vocabulary as possible. Among the books to be read are: Hirzel's Chemie; Brewer's Naturlehre; Mueller's die electrischen Maschinen; Helmholtz's Ueber; Goethe's Naturwissenschaftliche Arbeiten. No student is advised to take this course who has not had at least two years of thorough preparation in literary German. Two hours a week throughout the year. Alternates with 9a. Not given in 1902-1903.

10. Advanced German Composition. C. A. Buchheim, Materials for German Prose Composition. Parts I and II. One hour a week throughout the year.

11. Contemporary Literature in rapid readings. Works by Hauptmann, Sudermann, Wildenbruch, Fulda, Ebner-Eschenbach, Dahn, etc., are read. This course is intended for students who have completed Courses 1, 2 and 3, and who wish to become acquainted with the works of the most modern authors. Two hours a week throughout the year.

12. General History of German Literature. Bernhardt's or Karsten's Deutsche Litteraturgeschichte is used as text-book. A limited number of lectures are given. One hour a week throughout the year.

FOR GRADUATES AND ADVANCED UNDERGRADUATES.

In so far as the demand will justify the formation of classes, the department will offer the following courses:

13. Middle High German. Michels, Mittelhochdeutsche Grammatik, 1900; Henrici, Proben der Dichtungen des Mittelalters, Berlin, 1898: Selections from the Nibelungenlied; Walther von der Vogelweide; Parzival. Lexer, Mittelhochdeutsche Taschen-Woerterbuch.

14. Old High German. Brune's Althochdeutsche Grammatik, and the same author's Althocudehtsches Lesebuch (4 Ed.); Muellenhoff and Scherer's Denkmaeler Deutscher Poesie und Prosa (3 Edition); Behaghel's Historical Grammar of the German Language. Not given in 1902-1903.

15. Gothic and the Elements of Comparative German Grammar. Braune, Gotische Grammatik, 4 Auflage, Halle, 1895; Heyne's Ulfilas, 9. Auflage, von F. Wrede, Paderborn, 1896; Streiberg's Urgermanische Grammatik. This course is required for advanced degrees in English Philosophy. Not given in 1902-1903.

16a. Norwegian or Swedish. Grammar and Reading. Representative authors.

16b. Danish. Groth's Danish Grammar. Reading of representative authors. Courses 16a and 16b alternate. Neither given in 1902-1903.

17. History of German Literature to the Nineteenth Century. With special study of the classic periods of the twelfth and eighteenth centuries. Sherer's Geschichte der deutschen Literatur; Franke's Social Forces in German Literature are used as text-books. Papers on assigned topics will be required.

FRENCH

1. Elementary French. The first year's course in French comprises: Whitney's Practical French Grammar,* Parts I and II, with written exercises and systematic training in French pronunciation on the basis of Matzke's Primer of French pronunciation. The reading of about 150 duodecimo pages of graduated text is required. Super's French Reader is used. In addition to this, one of the following selections will be read: Contes de Fee's easy classic Fairy Tales; Bruno's Les Enfants Patriotes; Gervais' Un Cas de Conscience; Erkmann-Chatrian's Le Conscript de 1813. Writing French from dictation. French conversation. Five hours a week throughout the year, 8 a. m.

2. Advanced French. The work during this year comprises: Review of the French Grammar; Grandgent's Short French Grammar is used; Advanced French Composition and Syntax on the basis of Whitney's Grammar, part II. The reading of easy modern French in the form of stories, plays or historical or biographical sketches will be selected from the following list: Balsac's Cinq Scenes de la Comedie Humaine; Halevy's L'Abbe Constantin; George Sand's La Mare au Diable; Daudet's easier short tales; Dumas's Monte Christo; Malot's San Famille; Merimee's Colombia; Foa's Contes biographiques; Sept Grands Auteurs; Sarcey's Le Siege de Paris; Foncin's Le pays de France; Historiettes Modernes. Easy comedies: Legouve and Labiche's La Cigale chez les Fourmis; Labiche and Martin's La Poudre aux Yeux; Scribe's Le Verre d'Eau; Augier's Le Gendre de M. Poirier; Racine's Athalie; Corneille's Le Cid; Moliere's L'Avare. The class is expected to read two or three stories and two or three plays. French conversation. Four hours a week throughout the year, 9 a. m.

3. French Drama. Corneille's Cid, Horace and Polyeucte; Racine's Athalie, Esther and Andromaque; Moliere's Le Tartuffe, Les Femmes Savantes, Les Precieuses Ridicules; Hugo's Hernani and Ruy Blas. This course is open to students who have completed Course 2 or its equivalent. Three hours a week throughout the year.

4. Recent French Prose Writers. Daudet's Le Nabab (Wells);

* The following year Frasier and Square's Grammar will be used.

Paul Bourget (Extraits Choisis); Zolo's La Debacle, etc.; Victor Hugo's Prose (Warren); Rostand's Cyrano de Bergerac. The recitation, for the most part, is conducted in French. Two hours a week throughout the year. Course 4 alternates with 3.

5. Scientific French. The purpose of this course is to acquaint the student with technical terms, to familiarize him with scientific forms of expression and style, and to enable him to read with profit the scientific and technical contributions to French magazines. Herdler's or Davies's Scientific French Reader will be used. Open to students who have had two years of French. Two hours a week throughout the year.

FOR GRADUATES AND ADVANCED UNDERGRADUATES

6. Selections from Standard Works on History, Philosophy, Science, etc. For example: Lamartine's Scenes de la Revolution Francaise; Taine's Origines de la France contemporaine; Renan's Souvenirs d'enfance et de jeunesse; Rousseau, Emile, Livre IV; Pellissier's Mouvement litteraire au XIX e siecle; Mirabeau, Discours Choisis; Voltaire's Prose (Cohn and Woodward). Three hours a week throughout the year. Not given in 1901-1902.

7. Physiological Phonetics. Students will need Sievers, Grundzuege der Phonetic; Paul Passy, Les Sons du Francais, Paris; A Rambeau and J. Passy, Chrestomathie Francaise, Principes de Phonetique Experimentale par L'abbe Rousselot.

8. Introduction to the Study of Romance Language. Lectures based on the works of Diez and of Meyer Luebke, Schwan's Altfranzoesische Grammatik. Two hours during one semester.

9. Old French. Reading of selected extracts. Books: Cledat, Morceaux choisis des auteurs francais du moyen age; Gaston Paris, La Litterature francaise au moyen age; Extraits de la Chanson de Roland. Suchier's edition of Aucassin and Nicolete. Two hours during one semester.

10. General Survey of French Literature from the seventeenth century to the nineteenth century. Selections from standard works will be read and occasional lectures given.

SPANISH

1. Elementary Spanish. The first year's course in Spanish comprises: Edgren's Spanish Grammar with written exercises. The reading of about 100 pages of graduated texts is required. The material to be read will be selected from Matzke's First Spanish Readings or De Haan's Cuentos Modernos. In addition to this, either Alarcon's El Capitan Veneno or Galdos's Marianela will be read. The course is open to students who have had French or Latin. Three hours a week throughout the year.

2. Advanced Spanish. Reading of stories, plays and poetry. Material to be chosen will be from the following list: Historietas Escogidas de A. Perez Nieva; Valdes's Jose; Galdos's Dona Perfecta; Tres Comedias Modernas; Gil y Zarote's Guzman el Bueno; Bardos Patrioticos. To facilitate the work in composition Ford's Spanish Composition, Parts I and II, will be used as a text-book. Two hours a week throughout the year.

3. Classical Spanish. Cervante's Don Quijote, the first twelve books, with introduction, notes and vocabulary, by Professor Todd; Calderon's La Vida es Sueno; El Principe Constante; Spanish conversation. Two hours a week throughout the year. Not given in 1902-1903.

4. Spanish Poetry. El Poem del Cid. One hour. One hour a week throughout the year. Not given in 1902-1903.

These courses will be enlarged and new ones, including Italian, added, as the growth of the University warrants.

EQUIPMENT

The Library of the Modern Language Department—as yet small and inadequate—consists of some German, French, Spanish and Italian works. The most important of the German works in the departmental library are those of Lessing, Goethe, Schiller, Uhland, Heine, Grillparzer, Lenau, etc. Also works on Germanic philosophy and literature enable the student to do some advanced work. In French, Moliere, Racine, Corneille and other standard authors, as well as the necessary works on romance, philology and literature. During the last few years the following periodicals were subscribed for: Deutsche Rundschau; Revue des deux Mondes; Revue des Lan-

gues Romanes; La Revue Generale; Zeitschrift fuer franzoesische Sprache und Literatur; Neuere Sprachen. To reinforce the geography of European countries, wall maps of modern Europe, France, Spain and Germany are in use. There are prospects of a large increase in the departmental libraries, and it is expected that some instruments for experimental phonetics will be at the disposal of modern language students in the near future.

PHILOSOPHY AND EDUCATION

Assistant Professor Sheldon.

1. **Historical and Critical Introduction to Philosophy.** A course introductory to the study of philosophy, with papers and private reading. Three hours.

2. **Ethics.** Origin and development of the moral consciousness as regards both its form and its content, moral ideas of early societies; history of chief ethical theories since the beginnings of systematic moral reflection in Greece. Three hours.

COURSES FOR GRADUATES AND ADVANCED UNDERGRADUATES

The following courses will be open to those who have taken either Course 1 or 2 or who demonstrate a fitness for advanced study.

3. **Greek Philosophy.** History of Greek thought, with special attention to Plato and Neo-Platonism. This course will be given during the academic year. Two hours.

4. **British Philosophy.** From Bacon to Herbert Spencer. A close study of Hobbes, Locke, Berkeley, Hume, Hamilton, Mill, Bain, Spencer and the evolutionary group of thinkers. This course will be given during the academic year 1902–1903. Two hours.

5. **Kant and His Successors.** An examination of the systems of Kant, Fichte, Hegel, Herbart, Schopenhauer, Lotze and Wundt. This course will be given during the academic year, 1903-1904. Two hours.

EDUCATION

1. Teachers' Course. For students without teaching experience who are looking forward to careers as high school teachers and principals. The following aspects of pedagogy will be dealt with:

(a) Educational thinkers of the nineteenth century, Pestalozzi, Froebel, Herbart, Herbert Spencer and Thomas Arnold.

(b) Educational systems of England, Prussia and France compared with special emphasis on secondary education.

(c) History of method with chief attention to secondary schools. The recent reports of committees of the National Educational Association dealing with the correlation of studies and methods of teaching in high schools will form the center of instruction. Students will visit high schools and when possible opportunities for practice teaching will be offered. Four hours a week throughout the year.

2. American Education. The history of American education with reference to present problems in the schools. During the year 1902-1903 much time will be devoted to questions relating to the elementary curriculum and the teaching profession. This course is designed for teachers with experience and for advanced students in history and education. Three hours a week.

3. Education Club. Meets weekly for review of current books and periodicals. Occasional addresses will be secured from outside educators. One hour a week.

EQUIPMENT

The psychological laboratory is open to the use of the department of Philosophy of Education. The library is being rapidly strengthened by the addition of a large number of works bearing on this department. A large collection of text books on all subjects taught in primary and secondary schools is being formed for examination and study by teachers. A collection is also being made of old text books, showing the changes in method and material of instruction.

PHYSICAL EDUCATION

Mr. Burden

Physical education is treated as an important part of college

work. The University gymnasium is fitted with the most important gymnastic apparatus, such as chest weights, rowing machine, intercostal machine, traveling parallels, rope ladder, long horse, flying rings, Swedish stall-bar, ladder, etc.

Several pieces have been added during the year, such as wet spirometer, manometer, dynometer, for chest, back and legs, and instruments for taking physical measurements.

The main hall is forty by eighty-five feet, with a twenty-five foot ceiling. On the same floor is the office of the director, and a room for anthropometry; there is also a gallery for spectators in the west end. The annex contains dressing rooms, lockers, sponge and shower baths and boiler room. Students can have the use of a private locker for a fee of one dollar per year. A deposit of fifty cents is required for the key.

The department is conducted upon strictly scientific principles. Dr. Seaver's chart system is used, showing the relation of the individual in size, strength, symmetry and development to the normal man of the same age. Its aim is both hygienic and educative. It attempts to aid functions and develop form as well as to correct undeveloped or deformed parts, and supply recreation. It also aims especially to assist the student toward perfect nervous control, and by exercises of skill and precision to train nerve centers and muscles to act quickly and accurately in response to the will; and to produce mental and moral self-control. For general athletics train men to meet the emergencies of life by giving them readiness of resource, quickness of thought and action, and courage and good temper under difficulties.

Reasonable effort is made to encourage outdoor sports, and the director devotes a considerable time when the season is suitable to directing outdoor exercises, such as rambling, tennis and athletics of all kinds.

The students maintain an athletic club which encourages outdoor athletics, and are permitted by the Faculty to participate in intercollegiate sports. In addition to the regular class drills, a certain part of which consists of training in athletic sports, the University is represented by a football eleven, a baseball nine, a track athletic team, a tennis club, a golf club, a basket-ball team and an indoor baseball club. Other teams beside these are formed to give the University teams practice, and to give athletic practice to as many students as possible.

Women are admitted to separate classes in physical education under the same conditions as men.

Physical examinations are free of charge, and the director will be ready to examine students at any convenient time. Students may take the physical examinations and have their exercises prescribed, or may enter one of the regular classes.

PHYSICS

Professor Friedel.
Mr. Wold.

1. Elementary Physics. A general non-mathematical course, treating of mechanics, heat, sound, electricity, magnetism and light. The course is given by lectures, supplemented by demonstrations. Students who enter the class must know plane and solid geometry. A knowledge of the elements of trigonometry, while not required for admission to the course, will be found exceedingly helpful. Four hours.

2. Advanced Experimental Physics. This course emphasizes especially the experimental side of the science of Physics. It aims to be a critical analysis of the great masterpieces that have been produced in this science during the past centuries. A knowledge of trigonometry is required. Four hours.

3. Introductory Mathematical Physics. For those students who have completed the elementary course or its equivalent, and who, in addition thereto, possess a working knowledge of differential and integral calculus. The course introduces the student to the development and representation of the more important principles of physics by the aid of the powerful analytical methods of mathematics. Three hours.

4. Advanced Mathematical Physics. This is a continuation of Course 3. A thorough working knowledge of differential equations, as well as a knowledge of the elements of the theory of variations and spherical harmonics, is required. Four hours.

5. Theory of Sound. A mathematical treatment of acoustics. The subject is elaborated under the divisions: Velocity of propagation of sound waves in gases and liquids; intensity, pitch, timbre,

and interference of sound waves; energy of wave motion pertaining to sound; the phenomena of vibrating strings and membranes; and phenomena pertaining to the flexion of bars. Two hours.

6. Elementary Laboratory Physics. A laboratory course for beginners. Students are set to work to make experiments illustrative of the principles elaborated in the theoretical course of elementary physics. Each student has at least fifty experiments to perform during the course. The results of these experiments are carefully written out in a laboratory note book and handed to the assistant for approval or correction. One hour.

7. Electrical Standards. A laboratory course for the accurate determination of electrical units and the making of copies from standard units, now on hand. One hour.

FOR GRADUATES AND ADVANCED UNDERGRADUATES

8. Geometrical Optics. A treatment of the principles involved in the phenomena of light under the following subdivisions: Reflection and refraction of light; systems of lenses; the theory of aberration; thin pencils; dispersion and achromatism; the eye; optical instruments. Required, a knowledge of general physics, plane and solid analytical geometry, and calculus. Two hours.

9. Mathematical Theory of Electricity and Magnetism. This course is offered to students who have had adequate courses in physics, advanced calculus, differential equations and spherical harmonics. The course develops the mathematical theories of electricity and magnetism after the manner of presentation by Poincare, Drude, Maxwell and Thomson. Four hours.

10. Fourier's Theory of Heat. A mathematical treatment of the theory of heat, for graduate students. Students electing this course must have all the mathematical preparation required for Course 6. Four hours.

11. Advanced Laboratory Physics. This course is intended for students who have completed Courses 1 and 6. The course aims to develop independent experimental ability by submitting to the student some of the more difficult problems requiring experimental observations covering a considerable period of time. One hour.

12. Photometry. A laboratory course for the measurement and

comparison of various sources of light. Measurements are made and expressed in candle power, based upon accurate standards, as well as in terms of the total energy consumed. One hour.

EQUIPMENT

The physical lecture room has a seating capacity for about sixty students. The lecture table is supplied with gas and water cocks and electrodes connected with the University electric light plant. An arc light stereopticon in the rear of the room gives opportunity for stereopticon illustrations.

The physical laboratory consists of three rooms on the same floor. Every room is supplied with gas and water cocks, as well as with electrodes capable of furnishing as high as seventy-five amperes. A large part of the apparatus was secured from the best makers of Europe. Some of the finely finished and peculiarly suitable instruments were made in the shop belonging to the University.

PSYCHOLOGY

Professor Hawthorne

1. Elementary Psychology. Open to all who are prepared to take the study.

Elementary Psychology includes a study of the phenomena of the intellect, sensibility and will, with constant application to the processes of education, and the psychological origin of philosophical problems. Recitations, lectures and topics. Text books: James's Psychology; Ladd's Primer of Psychology; Titchener's Outlines of Psychology; Titchener's Primer of Psychology. Three hours. Includes laboratory work, one hour a week.

2. Experimental Psychology. Advanced. Open to Juniors and Seniors.

It is the aim of the laboratory to furnish every possible facility for such research work by competent students. Text books: Scripture's New Psychology; Sanford's Experimental Psychology; Titchener's Experimental Psychology. Three hours. Laboratory work included.

3. General Psychology. In this course, systematic instruction is given in general psychology, including theories of mental processes. Text book: Ladd's Outline of Descriptive Psychology. Three hours.

4. Physiological Psychology. Open to all who are prepared to take the study. A study illustrated by charts, models and histological preparations, of the human nervous mechanism, of the principal relations which exist between changes in this mechanism and the activities of the mind, and a discussion of the conclusions which may be drawn from these relations respecting the nature and laws of mind. Physiological Psychology includes an account of working hypotheses, methods, experimentations, and general results. The method is, as far as possible, illustrative, with a large amount of required reading upon selected topics. Text books: Ladd's Outlines of Physiological Psychology; Wundt's Physiological Psychology. Three hours.

5. Logic. Deductive and Inductive. Elementary, advanced and applied. Lectures, reading and discussions. Text books: Jevons and Welton. Three hours.

FOR GRADUATES AND ADVANCED UNDERGRADUATES

The following courses are arranged for alternate years, to meet the requirements of those who have completed the courses in any colleges or universities, and who wish to pursue the subject still further.

6. Abnormal and Pathological Psychology. This course of lectures is designed to discuss especially the physiological and mental conditions of sleep, dreams, and hypnotic, somnambulistic, and other allied states. The theory of illusions and hallucinations will be treated with considerable detail. Three hours.

7. Applied Psychology. Three hours a week throughout the year. Application of modern psychological principles to educational subjects; outlines of the psychology of touch; its use in education; motor abilities; accuracy of movement; fundamental principles of writing and drawing; sight, color teaching; space, form teaching; drawing. Three hours.

The following courses will be given in 1902-1903.

8. Research Work in Psychology. The object of this course is such training in accurate introspection, observation, experimenting,

and the art of research as is desirable for the general psychologist. Three hours.

9. Diseases of the Mind and the Nervous System. This course will be illustrated by models of the brain and other parts of the nervous system; insanity and kindred subjects will be studied in connection with topical lessons. Three hours.

10. Comparative Psychology. This course will aim to trace the development of intelligence as running parallel to the development of the nervous system from the lowest forms upward. It will cover the ground of animal psychology, considering it with special reference to the problems of human psychology, so far as these can be stated in terms of the life of lower forms. It will include also a review of the comparative psychology of races as found in their languages and customs. On the mythological side, the logic of the theories of education will be discussed and the relation of philosophy to the biological sciences determined. Lectures, recitations, discussions, reading. Wundt's Human and Animal Psychology, works of various authors, Romanes. Three hours.

11. Aesthetics. The object of this course is to review the history of thought on the subject of the beautiful; to give a philosophical account of the foundations upon which the arts rest; and to study scientific art theory in its relation to general philosophical system. Bancroft's History of Aesthetic, Marshall's Pain, Pleasure and Aesthetics and other works will be read in connection with the course. Three hours.

EQUIPMENT

The Psychological Laboratory occupies a large room in McClure Hall for lectures and class demonstrations, and for laboratory experiments, and original research work. There is also an additional small room for storing apparatus. The room is favorably located for experimental work—on the north side of the building, in the second story, having a steady light, and away from noise and interruption.

The laboratory, which is one of the few west of the Mississippi river, has a considerable store of the more simple apparatus, which is being added to by purchase and by manufacture in the shop of the University. Among the pieces of apparatus in use are the following: Revolving drum for testing reacting time, time of fatigue; electromagnetic fork and stand; time marker with Deprez signal for sine

curves; spark coil; telegraph key; graphic recorder for nerve action; steadiness gauge for determining steadiness of attention, and used in cross education; aesthesiometer for finding sensory circles in skin space; olfactometer; Galton whistle, for determining the highest audible pitch up to 90,000 vibrations per second; tone tester; audiometer; apparatus for color tests; apparatus in pseudoptics, etc. Additional apparatus of latest make already ordered for next session.

SOCIOLOGY

(See Economics.)

ZOOLOGY

(See Biology.)

THE SCHOOL OF MEDICINE

FACULTY

The Faculty of each school or college consists of the President of the University and the resident professors, assistant professors, lecturers and instructors giving instruction.

ORGANIZATION

The School of Medicine of the University of Oregon, which was established in 1887, in 1895 became a graded school occupying the advanced rank of those requiring from their students as a condition of graduation, attendance upon four full courses of lectures in a regular medical college. The result of this advance, as shown in our work under the four courses system has proved eminently satisfactory.

The course in the School of Medicine leads to the degree of Doctor of Medicine. It covers a period of four years of collegiate study, each year representing six months in actual residence.

The studies are graded, so far as practicable, throughout the four years, and this grading is arranged with careful reference to the relation which the subjects naturally bear to each other.

The work of the first two years deals with the so-called scientific or laboratory branches, while that of the last two years includes the principles and practice of medicine and surgery, their associated specialties, and the application of scientific or laboratory methods to clinical experience.

REQUIREMENTS FOR ENTRANCE

This school is a member of the Association of American Medical Colleges, and will conform to its requirements, as set forth in the following extract from the constitution of the Association:

ARTICLE III

Section 1. Each college holding membership in this Association shall require of each student before admission to its course of study, an examination, the minimum of which shall be as follows:

1. In English, a composition on some subject of general interest. This composition must be written by the student at the time of the examination, and should contain at least two hundred words. It should be criticized in relation to thought, construction, punctuation, spelling and handwriting.

2. In Arithmetic, such questions as will show a thorough knowledge of common and decimal fractions, compound numbers, and ratio and proportion.

3. In Algebra, such questions as will discover the student's knowledge of the fundamental operations, factoring and simple quadratic equations.

4. In Physics, such questions as will discover the student's understanding of the elements of mechanics, dydrostatics, hydraulics, optics and acoustics.

5. In Latin, an examination upon such elementary work as the student may offer, showing a familiarity usually attained by one year of study; for example, the reading of the first fifteen chapters of Caesar's Commentaries, and the translation into Latin of easy English sentences involving the same vocabulary.

Sec. 2. In place of this examination, or any part of it, colleges, members of this Association, are at liberty to recognize the official certificates of reputable literary and scientific colleges, academies, high schools and normal schools, and also the medical student's certificate issued by any state examining board covering the work of the foregoing entrance examination.

Sec. 3. Colleges, members of this Association, may allow students who fail in one or more branches in this entrance examination the privilege of entering the first year course, but such students shall not be allowed to begin the second course until the entrance requirements are satisfied.

Sec. 4. Colleges, members of this Association, are free to honor official credentials issued by medical colleges of equal requirements, except in the branches of study embraced in the last year of their own curriculum.

Sec. 5. Candidates for the degree of Doctor of Medicine in the year 1899 and thereafter shall have attended at least four courses of medical instruction, each course of at least six months' duration, no two courses of which shall have been in the same calendar year.

Sec. 6. Colleges, members of this Association, are free to give to students who have met the entrance requirements of the Association, additional credit for time on the four-year course, as follows: (a) To students having the A. B., B. S., or equivalent degrees from reputable literary colleges, one year of time; (b) to graduates and students of colleges of homeopathic or eclectic medicine, as many years as they attended those colleges, provided they have met the previous requirements of the Association and that they pass an examination in materia medica and therapeutics; (c) to graduates of reputable colleges of dentistry, pharmacy and veterinary medicine, one year of time.

Certificates of completion of prescribed courses in the University of Oregon in chemistry, physiology, osteology and syndesmology are accepted as equivalents for first year's work, except materia medica.

Examinations for matriculation may be arranged with the Dean at any time.

Special examinations in Latin and physics for conditioned matriculates will be held during the first week of the session; during the same period the fall examinations will be held for advancement

to second, third or fourth year standing for those who failed to attain the requisite number of credits in the spring examinations. This privilege does not apply to students who may have failed in their finals for the degree. For such there is each year but one examination, which occurs in March.

It is earnestly recommended to the student intending to take the entrance examination, that a careful review be given the studies mentioned, in order that he may be spared the humiliation of rejection.

Before admission every student is required to obtain the Dean's receipt for the payment of the matriculation fee. It will therefore be necessary for the applicant to present himself at the office of the Dean, register his name as a student in the Medical Department, and pay his fee. New students will be assigned seats in the order of date of matriculation.

COURSE OF STUDY

FIRST YEAR

Anatomy, with dissections; General Chemistry; Materia Medica and Pharmacy; Physiology.

Examinations at the end of year in Osteology and Syndesmology, Principles of Chemistry; Elementary Materia Medica, Physiology (Prox. Principles and the Blood).

SECOND YEAR

Anatomy, with dissections, finished; Normal Histology, finished; Physiology, finished; Chemistry, with laboratory work, finished, Materia Medica and Therapeutics, finished; Microscopy; Hygiene; Obstetrics (Pelvic Anatomy, Embryology, and Normal Labor); Physical Diagnosis; Clinical Medicine.

Examinations at end of year: Anatomy (final); Histology (final); Physiology (final); Chemistry (final); Materia Medica and Therapeutics (final); Hygiene; Obstetrics (Pelvic Anatomy, Embryology, and Normal Labor).

THIRD YEAR

Theory and Practice of Medicine, General Therapeutics, Princi-

ples and Practice of Surgery and Bandaging. Pathology, with laboratory work; Paediatries; Dermatology; Gynaecology; Genito-Urinary Diseases; Physical Diagnosis; Opthalmology and Otology; Obstetrics; Clinics; all.

Examinations in Principles of Medicine; Principles of Surgery; Pathology (final); Gynaecology; Physical Diagnosis; Obstetrics (final); Dermatology; Diseases of Genito-Urinary Organs; Opthalmology and Otology.

FOURTH YEAR

Medical Jurisprudence; Theory and Practice of Medicine; Principles and Practice of Surgery; Military and Operative Surgery; Clinics, all; Gynaecology; Genito-Urinary Diseases; Opthalmology and Otology; Rhinology and Laryngology; Bacteriology, with laboratory work; Paediatrics; Insanity and Diseases of the Nervous System.

Examinations: Final in above.

COURSES OF INSTRUCTION

SURGERY

Surgery in all its various branches will be taught during the third and fourth years, as per outline, by means of systematic lectures and operations in the presence of the class. In addition there will be demonstrations of all the details of bandaging, dressings, and the application of the various forms of apparatus used in the treatment of diseases, accidents and deformities, including fractures and dislocations. Members of the graduating class will have opportunities for practice in minor surgery, bandaging, etc., and subjects will be furnished for repeating all the usual surgical operations on the cadaver.

Professor Holt C. Wilson will deliver didactic lectures on Principles and Practice of Surgery, and clinics in Surgery will also be given by Professor W. H. Saylor, Professor Wm. Jones and Dr. Andrew C. Smith. Professor George F. Wilson will deliver a practical course upon operative and military surgery, and will give special attention to clinics on fractures and fracture apparatus.

CHEMISTRY AND TOXICOLOGY

During the first and second years Professor Binswanger will

treat these subjects with special attention to the fundamental principles of chemistry, medical and physiologic chemistry, physics and poisons.

The lectures will be fully illustrated by experiments, and a well-equipped chemical laboratory will aid materially in the practical instuction of students in urinary analysis and other chemical examinations. A course of practical laboratory work by students is an essential of the requirements.

THEORY AND PRACTICE OF MEDICINE

During the third and fourth years, as per outline, Professor Mackenzie will bring into prominence, in this branch, the essentials of theoretical and practical medicine, dwelling more particularly upon those subjects which will be likely to prove of most substantial use to the young practitioner, while not neglecting theoretical essentials. Teaching in this branch will be illustrated by clinics at the college and hospitals. Professor Wells will deliver lectures upon diseases of children; Professor Josephi upon diseases of the nervous system; Dr. Wheeler upon hygiene; and Dr. Geary upon physical diagnosis. Professors Bell and Mackenzie will hold medical clinics at St. Vincent's Hospital, and Professor H. C. Wilson at Good Samaritan Hospital.

ANATOMY

Professor Cauthorn will give instruction in General and Descriptive Anatomy. This subject will be considered during first and second years and finished at the end of the second year. These lectures will be illustrated by actual dissections, charts and drawings, and special attention will be given to the surgical relations of the subject. During the first year a course on Osteology and Syndesmology will be completed. A "bone room" has been added to the equipment of the college. This will be conducted for the benefit of such students as desire to borrow bones for purposes of study. Those wishing to avail themselves of this privilege will be required to deposit a guarante fee of $3.00 each, which will be returned at end of session, if no bones stand charged against the depositor.

Special arrangements have been made for storing dissecting material, so that no shortage need be apprehended. A sufficient supply for the beginning of the course will be on hand and utilized as soon as desirable. The Demonstrator will be on duty daily (except Saturday) as per schedule of lectures, as special attention will be given to this branch during first and second years.

MATERIA MEDICA AND THERAPEUTICS

Professor Bell will direct attention during first and second years to remedial agents, and to the actions of medicines proper, with particular reference to the their practical application. Specimens of the various medicines will be exhibited to the class, and attention given to electro-therapeutics.

BACTERIOLOGY

Dr. A. E. Mackay will deliver practical lectures on Bacteriology to fourth-year students.

The Bacteriological Laboratory is supplied with all the necessary apparatus, including incubators and sterilizers with thermostats and thermometers for a full course.

Each student receives instruction in bacteriological technique, including best methods of examining sputum, staining, etc., and a number of different bacteria will be cultivated and studied, such as typhoid, diphtheria, cholera, etc.

MICROSCOPY, HISTOLOGY AND PATHOLOGY

Dr. Yenny will deliver a practical course on the use of the microscope, histology and pathology. This will include the study of microscopical examination of pus, blood, urine, etc.

To illustrate the lectures on Histology and Pathology, a course will be given on section cutting, staining, mounting, etc. Histology will be considered during the second year and Pathology by third-year students. This course will be thoroughly practical and will be taught almost exclusively by laboratory methods.

OBSTETRICS

This subject will be taught during second and third years as per outline. Professor Josephi will illustrate the lectures upon this branch by charts, diagrams, specimens, etc. All the principal obstetric operations will be demonstrated on the manikin in presence of the class, and members of the graduating classes will be required to perform certain operations and instrumental applications on the manikin before the class.

Opportunities for clinical work will be furnished to the graduating class, and labor cases will be entrusted to individual members under proper direction, thus insuring an eminently practical knowl-

edge of this important branch. Professor ..... will conduct the clinical work in midwifery at Good Samaritan Hospital.

GYNÆCOLOGY

This branch will be taught didactically during third and fourth years by Professor Tucker. Professor A. J. Giesy will give clinics in gynæcology once each week at Good Samaritan Hospital. Practical instruction will be given in the use of the speculum and other instruments for the diagnosis and treatment of diseases peculiar to women, and every opportunity given for students to familiarize themselves with their use and application.

PHYSIOLOGY

Lectures upon this subject will be delivered during first and second years by Professor M. A. Flinn and Dr. A. D. Mackenzie, and will be illustrated by demonstrations which will occupy a prominent place.

DISEASES OF THE NERVOUS SYSTEM

Lectures on nervous diseases, including insanity, will be delivered by Professor Josephi during fourth year. In this course special nervous diseases not included in the lectures of others will be dwelt upon.

OPTHALMOLOGY, OTOLOGY, RHINOLOGY, AND LARYNGOLOGY

Professor Nunn will deliver lectures upon these subjects to third and fourth-year students and will give special attention to methods of diagnosis and treatment of the diseases of the parts involved. Practical clinical training in the use of the opthalmoscope, specula, laryngoscope and instruments for local applications, will be given. Clinics in Good Samaritan Hospital.

GENITO-URINARY DISEASES

Professor Saylor will, in addition to clinics on surgery at the Good Samaritan Hospital, deliver didactic lectures on diseases of the genito-urinary organs during third and fourth years. Lectures will be illustrated by drawings, models, etc., and numerous cases at the bedside in the hospital. Practical instruction in the use of instruments will be given.

PÆDIATRICS

Professor G. M. Wells will bring before the students during the

third and fourth years a wide range of subjects in connection with this chair. From the first hour of life the infant requires a special study. Its diet and environments are of paramount importance in the first few years of life. Then the great questions of schooling and school hygiene are now coming to the front as never before. The alarming increase of myopia among the young appeals to this chair for prevention as no other. The relation of paediatrics to the several branches of scientific medicine will be emphasized.

The surgery of infancy and childhood, manifestly so unique, will receive its share of attention.

DERMATOLOGY

Dr. Wm. E. Maxwell will deliver lectures on Dermatology during third year.

MEDICAL JURISPRUDENCE

Hon. W. D. Fenton will deliver lectures embracing the more essential points of this interesting branch of medicine during the fourth year.

PHYSICAL DIAGNOSIS

In addition to the general instruction on this important subject, Dr. Geary will hold clinics at the college for special work in this branch.

HYGIENE

Dr. Wheeler will deliver a course on Hygiene during the year. The subject will be treated from a practical standpoint.

LECTURES

All students are privileged to attend all didactic lectures, but only such as are laid down in the schedule are compulsory.

HOSPITAL CLINICS

Instruction in medicine and surgery, to be efficient, must combine didactic and clinical teaching, and no opportunities for the last named class of studies are in any sense equal to those offered by the wards of a general hospital.

Our connection, through members of the faculty, with St. Vincent's and Good Samaritan Hospitals, is such as to afford the most enlarged advantages for clinical instruction in the wards of those institutions, members of the medical staff of each being also members of the college faculty.

St. Vincent's new hospital is located only a few blocks from the college building on a tract of five acres. The portion now completed and occupied is 260 feet long, an average of 60 feet wide and is six stories in height, including the basement. It contains 350 beds and is admirably fitted in other respects with the most modern furnishings and appliances.

Good Samaritan hospital is delightfully located near the foot of the western hills, contains 125 beds, and is rich in clinical material of all kinds. These two hospitals afford opportunities to the students of this college for clinical work and instruction unequaled anywhere in the Northwest.

Their close proximity to the college clusters the buildings for both didactic and clinical instruction, so that the necessity for the student to travel long distances in order to properly carry on his work is overcome, and thus much valuable time saved to him.

Hospital clinics are held five days of each week during the session. Opportunities are given students to make diagnosis of disease and perscribe treatment therefor; and operations of endless variety are performed (in the presence of the class), according to the most advanced methods of modern surgery. An additional weekly medical clinic at the Good Samaritan Hospital has been arranged or the ensuing session.

Special attention will be given to instructing the student in methods of examination for purposes of diagnosis of both medical and surgical cases and the use of appropriate instruments used for that purpose. In addition to clinics formerly given a "Clinic Conference" in both medicine and surgery has been established which has proved very beneficial to the student.

Arrangements have been perfected for the obstetrical clinics. Each Senior student will be given an opportunity to attend and conduct, under proper supervision, cases of midwifery. This affords undergraduates a practical knowledge of midwifery, which must prove of great value in their future professional work.

These hospitals, already established and in successful operation

for many years, present most excellent and unequaled facilities for the study of disease at the bedside, and this branch of instruction will receive the very careful attention of the staff of clinical lecturers connected with the college.

Portland's geographical position is such that its hospitals receive patients from the surrounding territory over a large area of country, and the types of both medical and surgical diseases met with are as various as those met with in larger cities.

The Faculty, while not disparaging the value of didactic lectures, makes the system of clinical instruction occupy a prominent place in the curriculum, and it will be the aim of its members to make the instruction in all departments as complete and efficient as possible.

In addition to didactic and clinical lectures, instruction will be given by practical work in the dissecting rooms and laboratories, and by repeated oral examinations.

The biological laboratory has been greatly enlarged and new instruments added.

HOSPITAL APPOINTMENTS

Arrangements have been perfected by which the college has in its gift two appointments each year of house surgeons to the Good Samaritan Hospital. Each appointment is for one year, during which time board and lodging will be furnished free at the hospital.

An excellent opportunity is thus afforded to the graduate to acquire in the wards of a well equipped hospital, without any expense, a practical knowledge by clinical experience and actual practice. The house surgeons of St. Vincent's Hospital are also supplied from the alumni of this college.

LIBRARY

A medical library, known as "The R. B. Wilson Library," has been established at the college building. The nucleus for this is a gift of the medical libraries of the late Dr. R. B. Wilson, and Dr. Rodney Glisan. This has been added to by gift from the Federal Government and will be further enlarged from time to time. Students will be allowed the use of books (not to be removed from the building) under such rules as the college may prescribe.

LOCATION AND EQUIPMENT

The new college building, located corner Twenty-third and Lovejoy streets, opposite Good Samaritan Hospital, was completed and occupied during the session of 1892-03. It is a model of convenience, being furnished with all the aids to medical education which modern advancement requires. Laboratories for chemical, histological, pathological, bacteriological and other work are provided, and arrangements made for special attention to these important practical departments. The laboratory equipment has been doubled; extensive additions made to the apparatus in microscopy, and new instructors added to the Faculty for more extensive and specialized work in histology and pathology. The dissecting room is most conveniently arranged, is light and airy, and is furnished with artificial stone tables of special design, and electric fixtures for artificial illumination.

The building is heated by hot water, lighted by gas and electricity, and provision made for excellent ventilation. The twenty-third street electric cars pass the location every few minutes. To reach the college by this line take the Washington-street car, designated Twenty-third street. St. Vincent's new hospital is only a short distance from the college, and with Good Samaritan Hospital across the street, the arrangement of college and hospitals for clinical work is a most convenient one.

REQUIREMENTS FOR GRADUATION

The candidate for the degree of Doctor of Medicine must be of good moral character and twenty-one years of age. He must have studied medicine under a regular practitioner four years, including attendance upon lectures, and attended in a regular medical college authorized to confer the degree of M. D., four full courses of lectures, no two of which shall have been delivered within twelve months (unless admitted to advanced standing as per constitution of the Association of American Medical Colleges), the last of which must have been in this college; and must exhibit his tickets or other adequate evidence of attendance to the Dean of the Faculty. He must present to the Dean satisfactory evidence of having dissected the entire cadaver. He must have attended at least two courses of Dissections and Clinical Instruction. He must present to the Dean satisfactory evidence of time, study, laboratory work and moral character. He must have passed successfully the examinations prescribed by the Faculty, and have paid all fees due the College.

The degree will not be conferred upon any candidate who absents himself from the public commencement exercises without special permission of the Faculty.

The diploma given to graduates is that of the University of the State of Oregon, duly signed by the President and Secretary of the Board of Regents, as well as by the Medical Faculty.

Women will be admitted to matriculation, instruction and graduation on the same terms as men.

EXPENSES

All fees payable in advance.

All students who work in the chemical laboratory will be required to deposit $3.00, and those in the histological, pathological or bacteriological laboratory, $5.00 for breakage. These fees are returnable if no breakage is charged.

To those who enter at beginning of first year—

First year: Matriculation	$ 5.00
Fee for course	130.00
One-quarter examination fee	7.50
Second year: Fee for course	130.00
One-quarter examination fee	7.50
Third year: Fee for course	100.00
One-quarter examination fee	7.50
Fourth year: Fee for course	Free
One-quarter examination fee	7.50

To those entering beginning of second year (not having taken a course in this college)—

Second year: Matriculation	$ 5.00
Fee for course	130.00
One-third examination	10.00
Third year: Fee for course	130.00
One-third examination fee	10.00
Fourth year: Fee for course	130.00
One-third examination fee	10.00

To those who enter beginning of the third year (not having taken a course in this college)—

Third year: Matriculation	$ 5.00
Fee for course	130.00
One-half examination fee	15.00

Fourth year: Fee for course..... 50.00
One-half examination fee..... 15.00

To those who enter beginning of the fourth year (not having taken a course in this college)—

Fourth year: Matriculation.....$ 5.00
Fee for course..... 100.00
Examination..... 30.00

One full scholarship and two half scholarships are open to graduates of the University of Oregon with the degree A. B. or B. S., of not more than two years' standing. Particulars will be furnished upon application to either Registrar, University of Oregon, Eugene, or Professor Josephi, Portland.

BOARDING

Good board with rooms and all the usual accommodations, can be obtained in the vicinity of the college at rates varying from $4.00 to $6.00 per week.

MISCELLANEOUS

The opening lecture of the fourteenth regular annual session will be delivered at 9 A. M., Monday, October 2, 1902. Students are requested to be in attendance at the commencement of the session, so that they may not lose the benefit of knowledge to be derived from the opening lectures.

Students will matriculate at the office of the Dean, Professor S. E. Josephi, Dekum Building, Third and Washington streets, Portland, Or. For further particulars address

PROF. S. E. JOSEPHI, M. D.,

Room 610 Dekum Bldg., Third and Washington Sts., Portland, Or.

THE SCHOOL OF LAW

FACULTY

The Faculty of each school or college consists of the President of the University and the resident professors, assistant professors, lecturers and instructors giving instruction.

HISTORY

The year 1901-1902 completes the nineteenth year of the School of Law. More than two hundred graduates of this school are scattered over the Pacific Northwest, of whom an unusually large number, in comparison with other schools of law in the United States, have occupied or are now occupying official positions in connection with the law.

COURSE OF STUDY

The entire course consists of two sessions of thirty weeks each, from October to May, inclusive.

Junior Year—

1 The Common Law.
2 The Law of Contracts.

Senior Year—

1 Pleading.
2 Evidence.
3 Equity.
4 Constitutional Law.
5 Negotiable Paper.

TEXT BOOKS

The text books in the Junior year are Blackstone, Kent and Parsons on Contracts. In the Senior year, Gould on Pleading, Vol. I of Greenleaf on Evidence, Pomeroy on Equity, Black on Constitutional Law, and the General Laws of Oregon. "Cox's Questions" will be found useful in the work of the first year. The cost of Blackstone and the Question Book is $12.50, and they can be had from the professor in charge.

LIBRARIES

By the courtesy of the Multnomah Law Library Association,

students are permitted to consult the books belonging to it. They can also obtain the advantage of the Portland Library on payment of the nominal subscription of one dollar a year. The number of volumes in the Multnomah Law Library is nearly 7000, and in the Portland Library, 25,000.

LOCATION

The School of Law is located in Portland, and occupies the rooms of the Portland Business College. Evening sessions only are held. The sessions begin at 7:15 P. M., and the method of instruction is the lecture method. In the Junior year, lecture days are Tuesdays, Thursdays and Saturdays.

EXPENSES

The tuition fee is $60.00 (in gold) per session, payable in equal installments on the 5th day of October, January and March. Regular attendance is necessary, and no deduction can be made on account of absence. The final examination fee (non-returnable), is $10.00. Board and room can be had in Portland for from $4.00 to $6.00 per week.

MISCELLANEOUS

The year begins September 25, 1902. Applications for admission should be addressed to

PROF. RICHARD H. THORNTON,
Dean of the School of Law,
Portland, Or.

STUDENTS

THE GRADUATE SCHOOL

Adams, Percy Paget.....Eugene
Atkinson, Archibald A.....San Rafael, Calif.
Hammond, Winifred Bessie.....Medford
Inouye, Y.....Evanston, Wyo.
LeMiller, A. J.....Mt. Angel
Love, John E.....Drain
Marsh, Mary Ellis.....Eugene
Morton, Francis E.....Stayton
Orcutt, Albert Newton.....Drain
Powell, Amy Grace.....Astoria
Sears, Vestella Belle.....Ballston
Slater, Bertha E.....La Grande
Straub, Mary E.....Eugene
Thurston, Sibyl.....Eugene
Whittlesey, Walter L.....Portland
Wold, Grace Ivorda.....Eugene
Wold, P. Irving.....Eugene

THE ACADEMIC COLLEGES AND SCHOOLS

Adams, Alice Cecile.....Eugene
Adams, Percy Paget.....Eugene
Adams, Waldo J.....Eugene
Aldrich, Mertie.....La Grande
Alford, Eugene Clair.....Creswell
Aukeny, Dolly A.....Eugene
Armitage, Estella Viola.....Eugene
Auten, Mertie.....Eugene
Bacon, Grace.....Gold Hill
Bacon, Ralph.....Gold Hill
Ball, Elsie Madalene.....The Dalles
Bannard, Margaret W.....Grants Pass
Barber, Fanny Louise.....Portland
Barber, William Homan.....Sherwood
Bean, Condon Roy.....Salem
Bickers, Hazel.....Salem
Billington, Frank Edwin.....Eugene
Bilyeu, Coke I.....Eugene
Bisbee, Louis Evens.....Heppner

Blais, Clara Marie ..... Eugene
Blais, Napoleon Joseph ..... Eugene
Blythe, Edward Nation ..... Hood River
Bollman, Lenthal A ..... Eugene
Bradley, Marie Merriman ..... Medford
Bradley, Beth Traer ..... Portland
Bradley, William Eston ..... Parkers
Brooks, Wirt Wade ..... Summerville
Brown, Ada Estelle ..... Pendleton
Burch, Sarah Aurelia ..... Rickreall
Burdick, Louisa A ..... Cottage Grove
Bursell, Arvid ..... Central Point
Calef, Ida Adelia ..... Eugene
Cameron, Corinne Mae ..... Jacksonville
Campbell, Herbert Johnston ..... Chemawa
Campbell, Charles L ..... The Dalles
Carroll, Walter T ..... Eugene
Casteel, Calvin ..... Saginaw
Church, Ermine Eleanor ..... Eugene
Cleaver, Lulu Virginia ..... Portland
Cleaver, Marion George ..... Lebanon
Cochrane, Daniel Ulysses ..... Eugene
Coffey, Vanda Ruth ..... Drain
Converse, Charles Willard ..... Eugene
Cooley, Oleta Pearl ..... Brownsville
Craig, Lulu Maude ..... Eugene
Crawford, Daisy Pearl ..... Portland
Crawford, Gene ..... Portland
Crocker, Fred Wilbur ..... Portland
Cruson, Claude C ..... Eugene
Currin, Lula Wynne ..... Cottage Grove
Datson, Garfield Bradford ..... Portland
Davis, Carl H ..... Eugene
Day, George B ..... Newberg
Densmore, Harvey B ..... Eugene
Dick, Lewis Collins ..... Portland
Dillard, Frank Carleton ..... Eugene
Dodge, Rosa ..... Ashland
Dodge, Ira Louis ..... Ashland
Doering, Herman E ..... Portland
Dolph, Henry Villard ..... Portland
Dunn, Amy Louise ..... Eugene
Earl, Virgil D ..... Dayton
Eastland, Herbert Claire ..... Eugene

Eaton, Allen Hendershott.....Union
Eaton, Mabel Elizabeth.....Union
Elkins, Willard Alfred.....Eugene
Evans, Benjamin F.....Union
Eyre, George William.....Dayton, Wash.
Faulknor, Dallas Sylvester.....Spicer
Fenton, Ralph Albert.....Portland
Fisher, Chester C.....Baker City
Frazer, Arthur Louis J.....Eugene
Frizzell, Claude Adrian.....The Dalles
Frost, John F.....Bellevue
Fukunaga, Hideo.....Portland
Galey, Henry Carter.....Ashland
Gallagly, James Arthur.....Oregon City
Gamber, John Arthur.....Lacomb
Gay, Evans.....Kellogg, Idaho
Geddes, Alfred L.....Eugene
Geddes, Daisy Agnes.....Eugene
Gilbert, James H.....Watsonville, Calif.
Glass, Roy Winifred.....University Park
Glaze, Warren.....Prineville
Goldsmith, Zida A.....Eugene
Goodall, George Oliver.....Crawfordsville
Goodrich, Ray.....North Yamhill
Gorrell, Oscar.....Stephens
Graham, David.....Portland
Gray, Clyde Egbert.....Ashland
Gray, Mary Augusta.....Portland
Grider, Richard Leonidas.....Seiad Valley, Calif.
Grover, Carl Francis.....McMinnville
Hale, Frank B.....Grants Pass
Hammack, Roy Wallace.....Lebanon
Hammond, Delpha Alice.....Medford
Hammond, William.....Oregon City
Hanna, William Sherfey.....Plainfield, Ind.
Harms, Horace Horatio.....Cottage Grove
Hawthorne, Thomas.....Eugene
Hemenway, Ansel Francis.....Springfield
Hemenway, Minerva.....Springfield
Hemenway, May.....Eugene
Henderson, Louis Alfred.....Hood River
Hendricks, Ruby Villard.....Eugene
Leach, Arthur Davis.....Portland
Lewis, Leston Leland.....Cottage Grove

Hendricks, Elma Letty.....Eugene
Hertsche, Edward Albert.....Portland
Hickok, Clifton E.....Cascade Locks
Holmes, Gussie.....Astoria
Holmes, Amy M.....Astoria
Holmes, Lulu Maude.....Portland
Horn, Marion F.....Eugene
Hoven, Victor Emanuel.....Eugene
Howe, Fay D.....Eugene
Howe, Lola.....Eugene
Hudson, Florence Anna.....Tangent
Hughes, Matthew T.....Heppner
Hunt, Ralph B.....Eugene
Imbler, Royal Ray.....Hood River
Irvine, Constance Louise M.....Marshfield
Jackson, Chris. W.....Coquille City
Jackson, Merl Milton.....Coquille City
Jackson, Andrew Warren.....Bandon
Jakway, Isabel.....Portland
Jasper, Edward D.....La Grande
Johnson, William Holt.....Jacksonville
Johnson, Edmund Stanley.....Baker City
Johnson, Loris Melikoff.....Eugene
Jones, Louise.....Dayton
Jones, Robert Louis.....La Grande
Kelly, Elizabeth Latourette.....Oregon City
Kelly, Roy Wentworth.....Oregon City
Kerron, Seth Metcalf.....Portland
Kershaw, Harry M.....Grand Ronde
Kinsey, Mae DeCamp.....Eugene
Kuhlman, Henry William.....Eugene
Kuykendall, Sibyl Estella.....Eugene
Lamb, Harry Stanley.....Tillamook
Latourette, Mortimer Dillon.....Oregon City
Latourette, Howard Fenton.....Oregon City
Leach, Arthur Davis.....Portland
Lewis, Leston Leland.....Cottage Grove
Lewis, Fred V.....Prineville
Lister, Mildred Sybil.....Eugene
Livingston, Ethel Iola.....Albany
Logan, Elizabeth Ruth.....Eugene
Longmoor, Gertrude Emma.....Creswell
Lord, William Paine, Jr.....Salem
Luckey, Edna Pearl.....Pendleton

Lyster, Lily A.....Gardiner
Macneill, Marian Geddes.....Albany
Macrum, Garfield Howard.....Forest Grove
McArthur, Joseph Wilbur.....Amboy, Wash.
McBride, Horace.....Shedd
McClain, Carl Arthur.....Emerson, Iowa
McClain, Marion Francis.....Emerson, Iowa
McCormick, Mary Livingstone.....Lebanon
McDowell, Ira Austin.....Holley
McKinlay, Alice C.....Woodburn
McMurren, Adelle.....Baker City
Melroth, Emma Estella.....Portland
Merchant, Thomas Payne.....Carlton
Merritt, George Hiller.....Jacksonville
Merryman, Alice Edith.....Hillsboro
Miller, Kenneth C.....Eugene
Miller, Mabel D.....Eugene
Mitchell, Victoria Olive.....Merlin
Moon, Rupert Axley.....Kelso, Wash.
Moon, Everard Roy.....Kelso, Wash.
Moore, Charles Frederick.....Creswell
Moore, Lee Franklin.....Delight, Wash.
Moore, Charles Rutherford.....Brownsville
Morden, Minnie A.....Eugene
Moreland, L. Elizabeth.....Ashland
Morgan, Delbert Loyd.....Delight, Wash.
Morfit, Frank Lewis.....Malheur City
Moulton, Herbert G.....Baker City
Mount, Guy.....Silverton
Mount, Clyde.....Silverton
Mowry, George Oliver.....Moro
Murphy, George Washington.....Grass Valley
Murphy, William D.....Monmouth
Nelson, Nels Christian.....Eugene
Norris, Rea.....Oregon City
Oakes, Ivan Edward.....The Dalles
Olsen, Christian Albert.....Marion
Olson, David E.....Port Townsend, Wash.
Paddock, Arthur D.....Clackamas
Paddock, Harry O.....Clackamas
Parker, Grace.....Junction City
Patterson, Harriette.....Eugene
Patterson, Elmer M.....Eugene
Payne, Clyde A.....Ashland

Penland, John R.....Dayton
Pennick, Stephen A.....Adams
Perkins, Elsie Ethel.....North Yamhill
Perkins, Cloan N.....North Yamhill
Phy, Hetty.....Union
Plummer, Grace.....Portland
Plummer, Ross Mills.....Portland
Redmond, Charles A.....McMinnville
Renshaw, Roemer Rex.....Eugene
Rhodes, Clayborne Franklin.....Thurston
Riddell, Clyde Wellington.....The Dalles
Riley, Roscoe.....Sumpter
Robertson, Grant Alfred.....Independence
Ross, Blanche H.....Portland
Ross, Charles Victor.....Lebanon
Scarbrough, Marvin McRae.....Creswell
Scott, Mamie E.....Creswell
Sears, Sadie A.....Ballston
Sheldon, Kirk Miller.....Portland
Shelley, Ralph S.....Hood River
Shepard, Edgar R.....Salem
Sherk, Dafoe H.....Huntington
Shives, Alexander C.....Beuna Vista
Slusher, Alvah W.....Pendleton
Smith, Alice Mae.....Monmouth
Smith, Grace Elsie.....Monmouth
Smith, Mabel C.....Grants Pass
Smith, Winifred Derby.....Eugene
Smith, Elmer Elwood.....Drain
Sparks, Vernon V.....Baker City
Starr, Ralph G.....Dayton
Starr, Chester H.....Brownsville
Starr, Elmer G.....Eugene
Staver, J. Frederick.....Portland
Stilwell, Ina Elizabeth.....Dayton
Stockton, Holt.....Ballston
Stockton, Fred.....Ballston
Strange, Ferdinand A.....Ashland
Straub, Vincent J. G.....Deceased
Stubling, Arthur C.....The Dalles
Swift, Alice F.....Pleasant Hill
Swift, Helen.....Pleasant Hill
Swift, Lon Leo.....Baker City
Taylor, Harriett Linn.....Eugene

Templeton, Bertha Rowena ..... Halsey
Templeton, Joseph Holt ..... Halsey
Thayer, Fred G ..... Toledo
Thurston, Samuel R ..... Eugene
Tiffany, Maggie T ..... Eugene
Tiffany, Albert R ..... Eugene
Tomlinson, Vernon Wayne ..... Woodburn
Travis, Ella F ..... Eugene
Veatch, Elbert S ..... Cottage Grove
Wagner, Ben Franklin ..... Ashland
Waller, Amos Orville ..... Eugene
Walton, Ellen Pauline ..... Eugene
Ware, Joel B ..... Eugene
Warner, Fred Arthur ..... Oregon City
Warner, Charles T ..... Oregon City
Watts, Charles H ..... Eugene
Watts, Homer I ..... Athena
Watson, Chandler W ..... Ashland
Watson, Hallie H ..... Salem
Weed, Fred E ..... McMinnville
Wessela, Helena M. F ..... Gardiner
White, Bertha P ..... Eugene
Williams, Thomas L ..... La Grande
Williams, Etha L ..... Eugene
Williams, Nellie F ..... Eugene
Wilson, Kate Edna ..... Pleasant Hill
Wilson, Mary Edith ..... Pleasant Hill
Wither, May Gertrude ..... Lebanon
Wold, Cora Isabella R ..... Eugene
Wolf, Mark ..... Perrydale
Wooden, James L ..... Ashland
Woodley, J. P ..... Mt. Vernon, Wash.
Wright, Elmer Moreland ..... Union
Ziegler, Frederick J ..... Portland

THE SCHOOL OF MUSIC

Allen, Ada ..... Eugene
Allen, Eva ..... Eugene
Aubrey, Annie ..... Eugene
Bacon, Grace ..... Gold Hill
Barber, Fannie Louise ..... Portland
Bickers, Hazel ..... Salem
Booth, Barbara ..... Eugene

Booth, Floyd ..... Eugene
Booth, Roy ..... Eugene
Carroll, Camille ..... Eugene
Chessman, Bernice ..... Eugene
Clark, Helen ..... Eugene
Cockerline, Winnie ..... Eugene
Coffey, Vanda ..... Drain
Davis, Elsie ..... Eugene
Doering, Herman E. ..... Portland
Eaton, Mabel ..... Union
Ellspass, Genevieve ..... Eugene
Ellspass, Edna ..... Eugene
Ford, Carrie ..... Eugene
Ford, Sadie ..... Eugene
Frazer, Arthur L. ..... Eugene
Friendly, Theresa ..... Eugene
Frizzell, Claude ..... The Dalles
Garrett, Lida ..... Eugene
Glaze, Warren ..... Prineville
Goldsmith, Zida ..... Eugene
Green, Ellen ..... Eugene
Griffin, Elizabeth M. ..... Eugene
Harding, Clara ..... Eugene
Hawthorne, Pearl ..... Eugene
Hemenway, Minerva ..... Springfield
Hemenway, Ansel ..... Springfield
Kays, Leone ..... Eugene
Kauffman, Marvel ..... Eugene
Kelly, Kate ..... Eugene
Knox, Lizzie ..... Eugene
Kuykendall, Mabel ..... Eugene
Kuykendall, Sibyl ..... Eugene
Logan, Wanda ..... Eugene
Lombard, Naomi ..... Eugene
Loomis, Celia ..... Eugene
Macneill, Marion ..... Albany
McClain, Carl ..... Emerson, Iowa
McElroy, Lillian ..... Eugene
Matthews, Agnes ..... Eugene
Martin, J. E. ..... Eugene
Merritt, George ..... Jacksonville
Moore, Mary ..... Eugene
Moore, Mrs. C. F. ..... Eugene
Mount, Grace ..... Eugene

Neilsen, Christine ..... Eugene
Ostrander, Nina ..... Eugene
Paine, Elmer ..... Eugene
Payne, Clyde ..... Ashland
Renshaw, Lulu ..... Eugene
Renshaw, Roy R. ..... Eugene
Roche, Mary ..... Eugene
Rowland, Raymond ..... Eugene
Rowland, May ..... Eugene
Rowland, Otto ..... Eugene
Sheldon, Kirk ..... Portland
Smith, Pearl ..... Eugene
Smith, Winifred D. ..... Eugene
Smith, Mrs. Mae Huff ..... Eugene
Stansbee, Mrs. James A. ..... Eugene
Stauffer, Paul ..... Eugene
Staver, J. Frederick ..... Portland
Stilwell, Ina ..... Dayton
Swift, Helen ..... Pleasant Hill
Templeton, Bertha R. ..... Halsey
Templeton, Joseph H. ..... Halsey
Washburn, Martha ..... Eugene
Washburn, Helen ..... Springfield
Washburn, Alice ..... Eugene
Watson, Hallie H. ..... Salem
Watson, Chandler H. ..... Ashland
Williams, Ethel ..... Eugene
Williams, Burke ..... Eugene
Wold, Clara ..... Eugene
Wold, Cora ..... Eugene
Wold, Grace ..... Eugene
Wood, Lillie ..... Eugene
Ziegler, Wilma ..... Eugene
Ziegler, Zella ..... Eugene

THE SCHOOL OF LAW

Ambrose, James M. ..... Portland
Bukowsky, R. James ..... Portland
Dick, Paul S. ..... Portland
Dolph, Marion F. ..... Portland
Ellsworth, A. M. ..... Portland
Haney, B. E. ..... LaFayette
Hatton, George C. ..... Klamath Falls

Jenkins, Hopkin, A. B.....Portland
Johnson, Albert P.....Nebraska
Kelly, George.....Portland
Klosterman, J. Harry.....Portland
La Calle, Jose M.....Manila
Mosessohn, David N.....Portland
Mosessohn, Nehemiah.....Portland
Mumeda, Hiroshi.....Japan
Newsom, John D., A. B.....Prineville
Ofner, Jacob B.....Portland
Pickett, M. Otto, B. S.....Newberg
Smith, Alfred F.....Portland
Stowell, B. Leroy.....Portland
Thomas, Robert H., B. S.....Portland
Tillman, Henry M.....Portland
Upton, Jay H.....Portland
Wallace, N. Wilbur.....Portland
Wilson, George W.....Portland

THE SCHOOL OF MEDICINE

Adams, E. Martin.....McMinnville
Armes, R. S.....Woodburn
Beman, Ira T.....Portland
Biggers, George L.....La Grande
Bilderback, Joseph, Ph. G.....Portland
Bixby, Alice A.....Portland
Braden, Walter.....New York
Bradley, Lawson G., A. B.....Eugene
Chamberlain, Charles T.....Portland
Day, Henry B.....Dayton, Wash.
DeVane, Oscar.....Pilot Rock
Equi, Marie D.....San Francisco, Calif.
Fessler, Theo., Ph. D.....Seattle, Wash.
Franklin, Harry H.....Portland
Golden, Robert E., B. M. E.....Marshfield
Green, Herbert.....Hay, Wash.
Grieve, Robert.....Buffalo, N. Dak.
Gunning, John M.....Davenport, Wash.
Hall, Chester G.....Sherwood
Hanson, Albert C.....Portland
Harris, Fred W.....Forest Grove
Haviland, William K.....Pequaming, Mich.
Hayes, James C.....Baker City

Hickman, Harvey O.....Oregon City
Hill, George W.....Portland
Hoseh, Jacob F.....Scio
Houston, Harry L.....Baker City
Irvine, E. Lloyd.....Portland
Jackson, Harold E.....Portland
Killingsworth, William, Jr.....Portland
King, Alfred E.....Ontario, Canada
Kremer, Maud.....Grants Pass
Lemon, Cora B.....Grants Pass
Leob, Sanford.....Portland
Lieuallen, Fred.....Adams
Manion, Katharyn C.....Portland
Marshall, Edward A.....Portland
Matson, Ralph.....Woodburn
Matson, Ray.....Woodburn
McCornack, Condon C., A. B.....Eugene
McLachlan, Mary.....Portland
Merryman, George H.....Hillsboro
Milner, Ralph A.....Portland
Mount, Hugh S.....Silverton
Neubauer, Richard.....Portland
Newsome, Gail S.....Prineville
O'Leary, Cornelius A., A. B.....New York
Ostrander, Guy H., B. S.....Union
Parker, Mary E.....Bridgeport, Calif.
Patton, Bertha T.....Portland
Patton, Elsie.....Portland
Peacock, Frederick.....Brandon, Manito
Preston, Robert A.....Portland
Reitzel, Merrit E.....Ruckles
Ross, John C.....Cathlamet, Wash.
Ross, Thomas W.....Astoria
Showhan, Glenn E.....Payette, Idaho
Skinner, Mary D.....Sandon, B. C.
Slate, Olive.....Dallas
Smith, Frederick S.....Portland
Smith, J. Newton.....Portland
Snively, J. Howard.....Prosser, Wash.
Spencer, Walter V.....Thatcher, Wash.
Stone, Alvin B.....Athena
Tamiesie, George W.....Hillsboro
Templeton, Charles L., B. S.....Halsey
Thornton, O. A., B. S.....Astoria

Torgler, George A.....Portland
Van Alstine, Eunice.....Portland
Van Vechten, Ward B., B. S.....Sumner, Wash.
Via, Guy F.....Forest Grove
Walker, Ralph C.....Portland
Wheeler, Glenn.....Portland
White, Nina.....Coquille
White, Floyd M.....Coquille
Whiting, Frank M.....Quincey, Calif.
Wiley, Percy J.....Tillamook
Wiltsie, R. W.....Seattle, Wash.
Wiltsie, S. F.....Seattle, Wash.
Yomada, K., M. D.....Japan

SUMMARY OF OFFICERS AND INSTRUCTORS

Administration—		
Regents		11
Other Administrative Officers		14
		25
Instruction—		
Academic Colleges and Schools	23	
Assistant Instructors	7	
Special Lecturers	9	
School of Music	4	
School of Medicine	23	
School of Law	5	71
		96
Deduct for names appearing more than once		11
Total officers and instructors		85

SUMMARY OF STUDENTS

Graduate School	17	
Academic Colleges and Schools	271	
School of Music	85	
School of Medicine	80	
School of Law	25	
*Summer School (Summer 1900-1901)	20	
		498
Names entered twice		28
Net total of students in all departments		470
Total officers, instructors and students		555

The following table shows the attendance since the time the first two preparatory years were abolished:

YEAR	TOTAL NUMBER	NUMBER AT EUGENE
1897-98	336	250
1898-99	265	181
1899-00	320	220
1900-01	437*	343
1901-02	470	365

*In the catalogue of 1900-01 the Summer School students were erroneously counted. They belong in the year 1901-02.

INDEX

	PAGE
Academy, The University	75
Accrediting, Change in Method of	41
Affiliation, University	29
Alumni Association	28
Anthropology	94
Appointment of Teachers	29
Astronomy	105
Biology	85
Buildings and Grounds	20
Bulletins	34
Calendar	5
Chemistry	90
Civil and Municipal Engineering	99
College of Literature, Science and the Arts	57
College of Science and Engineering	64
Commerce, School of	63
Committees of the Faculty	17
Degrees	18-19
Bachelor of Arts	18
Bachelor of Science	19
Doctor of Philosophy	35
Engineering Degrees	37
Master's Degree	36
Drawing and Descriptive Geometry	100
Economics	96
Economics and Sociology	95
Education	143
Electrical Engineering	107
Employment	23
Engineering, School of	68
English	108
English Literature	113
English Language and Early English Literature	116
Expenses	23
Extension, University	29
Faculty, The General	10
Fees	22
Fellowships and Scholarships	38
French	139
General Information	22
Geology	120
Government	23
Graduate School	34
Graduation Requirements	55
Greek Language and Literature	122
Highway and Railway Engineering	102
History	124
Hours (or credits)	56
Hydraulic and Municipal Engineering	103
Latin Language and Literature	127
Law or Journalism, Collegiate Course Preparatory to	62
Law, School of	164
Lecturers, Special University	16
Library and Reading Room	32
Mathematics	129
Mechanical Engineering	132
Mechanics	101
Medicine, School of	150
Medicine and Dentistry, Special Course Preparatory to	67
Medicine and Dentistry, Four Year Course Preparatory to	72
Mineralogy	134
Mines and Mining, School of	73
Modern Language Department	135
Germanic Languages and Literatures	135
Romanic Languages and Literatures	139
Music, School of	82
Officers, Administrative	9
Philosophy and Education	142
Physical Education	143
Physics	145
Politics	98
Prizes and Honors	32
Probationary Status of Students	54
Psychology	147

Publications 33
Public Speaking 118
Regents 8
Registration 22
Requirements for Entrance..39-42-76
Requirements, Increase in 41
Societies 24
Athletic 27
Literary 25
Miscellaneous 28
Musical 27
Religious 24
Scientific 26
Sociology 150
Spanish 141
Special Students 55
Structural Engineering 104
Students, List of 166
Summary 178
University, The 18
University, History and Organization 20
Zoology 150

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